

**PERSPECTIVES ON THE LEGALIZATION OF CANNABIS IN CANADA AND  
HOW THIS MAY IMPACT UNIVERSITY LIFE**

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## **Abstract**

The Government of Canada announced the passing of bill C-45, providing legal access to Cannabis in Canada and, to control and regulate its production by October 2018 (Canadian Broadcasting Corporation [CBC], 2017). Cannabis is the most commonly used illicit substance among university students, where the percentage is higher than any other age group (Adamson, UNICEF Office of Research, & Canadian Electronic Library, 2013). Yet little research has been conducted on their perceptions of cannabis legalization. It is inevitable that this change in cannabis policy will be implemented, and university students are of particular importance. The purpose of this study is to further understand students' views and concerns pertaining to the recent topic of legalization of cannabis in Canada. Participants were interviewed to understand, and to explore, their perceptions of legalization of cannabis, giving them the opportunity to express how it may impact their lives, specifically while attending university. Themes arising from these semi-structured interviews and their implications for future research and practice are explored.

*Keywords:* Governance and Public Policy, Cannabis, Regulation, University Students

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## Chapter 1: Review of the Literature

The purpose of this study was to understand undergraduate students' perceptions of legalization of cannabis in Canada at Memorial University of Newfoundland. With the passing of bill C-45 targeted to legalize access to cannabis, and with the current use of cannabis on campus, it is important to determine the possible impact that this policy may have among university students. This research study will explore student perceptions on this topic. A better understanding of students' views by policymakers, the Canadian government, and other universities across Canada can help inform and prepare these stakeholders to respond more successfully to any implications that may arise with the legalization of cannabis in Canada.

### The Current Cannabis Policy in Canada

Canada was one of the first nations to criminalize cannabis when it was added to the schedule of prohibited "narcotics" in 1923 (Erickson & Oscanella, 1999). Extreme views on the dangers of cannabis use had been reported during that period, including the contention that individuals who use cannabis might "become raving maniacs...liable to kill or indulge in any form of violence" (Conservation Political Action Conference [CPAC] documentary: *Chasing the high, the politics of pot*, 2015, 3:23). Today, cannabis is listed as a controlled substance in Schedule II of the Controlled Drugs and Substances Act (Controlled Drugs and Substance Act [CDSA], 2014). Unless cannabis is regulated for production and distributed for medicinal purposes, it is subject to offences under that Act.

**Medicinal cannabis.** Although cannabis is currently illegal for the general population, the Canadian government ruled that individuals should be able to access

cannabis legally to treat a medical illness. Thus, access was granted to Canadians for medical purposes under the Marijuana Medical Access Regulations of 2001 (Cox, 2018). According to Wilson-Raybould, Philpott, and Goodale (2016), Canadians' knowledge of legal cannabis regulation can be attributed to successive court decisions over recent years which resulted in legal access to cannabis for medical purposes. This has allowed Canadians, with the support of their physician, to obtain cannabis from a licensed producer, cultivate their own cannabis, or designate someone to grow it on their behalf. In 2001, after medicinal cannabis implementation, 100 Canadians were granted access to legal medical cannabis, which has increased to over 200,000 Canadians in 2017 (Health Canada, 2012). A number of studies reported the medical benefits of cannabis for individuals living with a diverse range of illnesses (Amar, 2006) including high-prevalence rates (14%-61%) for those living with HIV/AIDS (Belle-Isle & Hathaway, 2007). Bottorff et al. (2011) studied the perceptions of medicinal cannabis users whereby individuals with HIV/AIDS reported cannabis as beneficial for decreasing anxiety/depression, pain, nausea and vomiting, while increasing appetite and improving adherence to therapy. One participant diagnosed with HIV/AIDS discussed his thoughts regarding medical cannabis:

Well, it's a great supplementary treatment when you're dealing with AIDS or hepatitis, it reduces pain, it calms you down, it gets rid of nausea, it gives you an appetite. . . [and] with hepatitis and the AIDS drugs, sometimes you have one heck of a problem taking the pills [because] they come back up. . . so once and a while I'll just take some marijuana. (p. 773)

Medicinal cannabis has also been explained to be therapeutically helpful for those living with multiple sclerosis (Clark, Ware, Yazer, Murray, & Lynch, 2004) specifically to relieve pain, tremors, numbness and to relax the whole body (Verhoef & Page, 2006). Cannabis use has also shown promising therapeutic effects for individuals suffering with cancer (Tramer, Carroll, Campbell, & Reynolds, 2001), Parkinson's disease (Croxford, 2003), Alzheimer's disease (Eubanks et al., 2006), rheumatoid arthritis (Blake, Robson, Ho, Jubb, & McCabe, 2006), and mood disorders (Ashton, Moore, Gallagher, & Young, 2005).

Cox (2018) suggested that Canada has witnessed a significant increase in medical cannabis dispensaries, medical mail order cannabis services, and other grey markets operating under an allowance for medical cannabis when in reality it may be serving those using cannabis recreationally. Increases in cannabis use, cannabis use disorders, fatal crashes related to cannabis, and associated emergency department visits have been attributed to the legalization of medical cannabis (Carliner, Brown, Sarvet, & Hasin, 2017). Sarvet et al. (2018) contend that permitting the medical use of cannabis has sent a false and powerful message to the young individuals of this country that cannabis is not harmful. As they stated, "If pot is medicine, teenagers will rightfully reason, how can it hurt you?" (p. 68).

According to Wilson-Raybould et al. (2016), the decision to allow Canadians to access medical cannabis has "enabled the establishment of a system of cannabis production and sale that informs our thinking around the regulation of cannabis for non-medical purposes" (p. 9). In Colorado, medical cannabis was legalized years before recreational cannabis was legalized, leading to discrepancies in taxation, allowable

possession amounts, testing requirements, and issues with labelling and packaging (Ghosh et al., 2016). They added that Colorado provided advice for others planning to legalize cannabis, recommending that policymakers align regulations early in the process to avoid the possibility of any confusion with cannabis legalization.

**Recreational cannabis.** Even though the federal government plans to legalize recreational use of cannabis in Canada, cannabis currently remains illegal for recreational use until legislation is enacted. Over the past century, recreational use of cannabis has been the subject of criminal sanctions, creating tension between those that use cannabis recreationally and those who enforce criminal sanctions (Pacula, Kilmer, Grossman, & Chaloupka, 2010). Possible sanctions include five years' imprisonment for possession of cannabis, up to seven years' imprisonment if cannabis is cultivated, and lastly, life imprisonment if an individual is found to be distributing and selling cannabis (CDSA, 2014). According to Statistics Canada (2013), around 60,000 Canadians are arrested each year for simple possession of cannabis. While only a small proportion of those charged are actually imprisoned, the numbers are not insignificant. This can be attributed to individuals buying cannabis through the black market or growing it themselves, both of which constitute production and trafficking offences under the Controlled Drugs and Substances Act (CDSA, 2014). Records also show that 500,000 Canadians carry a criminal record for non-violent cannabis drug offences each year, sadly limiting their employment opportunities, placing restrictions on their ability to travel, and sending individuals down a route that limits life opportunities (Erickson & Fischer, 1995).

Currently, personal possession of cannabis is viewed as a more severe violation of societal norms than selling cigarettes to a minor (Fischer, Rehm, & Crépault, 2016).

Hence, Canadians argue that legal reform is necessary given the gravity of the current laws when compared to their modest impact on criminal law and in terms of economic costs. This was expressed in the CPAC documentary: “*Chasing the high, the politics of pot*” (2015) that although Canadians differ on a cannabis solution, they all agree that there is a problem. The current recreational cannabis policy is costly, and in 2002 it was calculated that an average of 1.2 billion dollars was spent enforcing cannabis possession laws in Canada that could have ultimately been distributed elsewhere (Rehm et al., 2006). In addition to spending billions of dollars annually enforcing cannabis laws, the burden and harm associated with this enforcement are further outweighed by the drawbacks associated with such enforcement (O’Callaghan, Reid, & Copeland, 2006). It has been well advised that the current policy regarding cannabis use is limited in effectiveness and signals a disconnect between the current law that is enforced and actual societal practices. This disconnect is said to have highlighted and initiated the need for regulatory change in Canada to legalize, tax, and regulate cannabis, and to focus on promoting education around cannabis and cannabis use rather than criminal prosecution.

### **Current Cannabis Trends in Canada**

Grayson (2010) explained that despite having illegal status, cannabis remains a widely-used substance in Canada. It is the favorite recreational drug of Canadians, the most commonly used illicit substance, and the second most used recreational drug in Canada after alcohol (Health Canada, 2012). Cannabis is illegal and prohibited under the same federal and international drug statutes as heroin and cocaine (Crépault, 2014). According to Health Canada (2012), 41.5% of Canadians have reported using cannabis at least once in their lifetime, compared to 3% who regularly use it. Cannabis is mainly used



to experience the so-called high that provides mild euphoria, relaxation, and perceptual alterations that can be accompanied by infectious laughter, talkativeness, and increased sociability (Iversen, 2008).

**Cannabis use among young Canadians.** Canadian youth ranked first in the world for cannabis use in an international survey, with 33% indicating lifetime cannabis use by the age of 15 (World Health Organization [WHO], 2012). Cannabis use among young Canadians continues to be higher than for any other age group, at 20.3% (Health Canada, 2012), and are twice as likely to experiment with cannabis than tobacco (Canadian Student Tobacco, Alcohol and Drugs Survey, 2016). Adamson et al. (2013) confirmed that Canadian youth ranked first in cannabis use, but third from last in tobacco use in comparison to 29 wealthy nations.

In a survey of 1000 individuals, Hall (2015) found that cannabis use and risk for cannabis use disorder peaks during university years, with 30% of university students reporting use of cannabis within the last year, a rate that is much higher than the general population. These findings support the arguments that the current law and regulations concerning cannabis use as a criminal offence do not deter young individuals from using cannabis. Porath-Waller (2009) explored the possibility that cannabis is perceived to be a harmless drug. They implemented a focus group study with 76 young individuals from across Canada between the ages of 14 and 19 to ascertain their views on cannabis. Specifically, these participants indicated that cannabis is safe, natural, and non-addictive, while also expressing their unawareness of the negative consequences associated with cannabis use. This could be a reason why the average age of cannabis use is decreasing, with more younger Canadians currently using cannabis in comparison to previous years.

For example, in one report 28% of 11 to 15 year olds in Canada indicated having smoked cannabis in the past year (CPAC, 2015).

Although cannabis use is widespread, 90% of Canadians do not progress to using cannabis daily, usually discontinuing their use by their late twenties when employment and family responsibilities appear (Mental Health Council of Australia [MHCA], 2006). Van Ours (2012) noted that cannabis use usually starts between the ages of 15-25 years and if it has not started before the age of 25, then such use is highly unlikely to begin later in life. Most people who use cannabis do so occasionally as recreational users, somewhat comparable to those who drink a beer on the weekends (Van Ours, 2012).

**Prevalence of cannabis use on campus.** Drug use rates have been increasing among adolescents and university students since the mid-1990s, and although there have been various prevention efforts, this trend has continued today (Mohler-Kuo, Lee, & Wechsler, 2003). The general consensus of researchers over the past three decades has been that approximately one in three college students have tried cannabis at least once (Johnston, O'Malley, Bachman, Schulenberg, & Miech, 2015; Mohler-Kuo et al., 2003). Cannabis use now has the highest rate of use among young individuals aged 18-25, at 26.1% and is the most commonly used illicit substance among university students, where the percentage is higher than any other age group (Adamson et al., 2013). Further, nearly one fourth of past-year cannabis use by first-year university students meet the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) criteria for a cannabis use disorder (Caldeira, Arria, O'Grady, Vincent, & Wish, 2008). Prior research has found that university students who use cannabis are more likely to be male, single, members of fraternities or sororities, non-athletes, not religious, cigarette smokers, and heavy alcohol

drinkers (Johnston et al., 2015). It was also found that among this age group, multiracial students had the highest cannabis use rates at 28% versus 19.5% among white students (Ghosh et al., 2017).

### **Future Legislation and Policy Framework**

The political debate over cannabis legalization in Canada was a key contributor to the Liberals winning a majority government in the 2015 federal election (CBC, 2015). In the CPAC documentary: *Chasing the high, the politics of pot* (2015), Prime Minister Justin Trudeau stated, “I’m actually not in favor of decriminalizing cannabis, I’m in favor of legalizing it” (0:45). This corroborates the position that although cannabis will be legalized, there will still be criminal penalties for those operating outside the legal framework. Cannabis legalization will be implemented with strict controls and within a public health framework (LeBlanc, 2016).

**Bill C-45.** It was announced that the C-45 bill was approved by more than a two-to-one margin, making Canada the first country to reverse cannabis prohibition (Collier, 2017). As presented, this bill was to be implemented by October 2018 and will draw upon the federal Task Force on Cannabis Legalization and Regulation that recommends taking a public health approach to cannabis legalization. Interestingly, cannabis access provincially will likely vary due to the federal government stepping back from setting national standards for retail distribution (Kelsall, 2017). As explained by the Government of Canada: *Introduction of the cannabis act* (2017), the Federal Government will regulate the production of cannabis, but policies around consumption will be left to provinces and territories. Although this enables the rules and guidelines for cannabis to be adaptive and reflective of each province’s demographic, it could potentially result in inconsistencies

across the country.

**Goals of cannabis legalization.** According to the Government of Canada:

*Introduction of the cannabis act* (2017) the goals of legalization and regulation of cannabis in Canada are to restrict youth access to cannabis, deter and eventually eliminate the illicit market, and reduce the burden that prohibition has placed on the criminal justice system. This framework for legalization would be seen to protect young Canadians by ensuring that cannabis is out of the hands of children and youth. Meanwhile, more serious cannabis offences would be punished, especially targeting those who sell and distribute cannabis to young individuals. As Cox (2018) stated, “Moving from a prohibition model to one of legalization will allow federal focus to be placed on harm minimization, restricting youth access, social education, and maintaining public health and safety as central policy tenements” (p. 205). The new cannabis policy is rooted in recognition of the failure of criminal sanctions on cannabis use, and the need to re-focus the strategy and regulation on public safety, which first means educating Canadians.

## **Education**

Considering the statistics that show widespread Canadian cannabis use, the current cannabis policy clearly does not deter Canadians from consuming cannabis, and the Canadian government now realizes that harsher penalties do not lead to lower rates of cannabis use (Hall, Fischer, Lenton, Reuter, & Room, 2011). Cannabis has been described as a complex drug because it is associated with both negative and positive therapeutic effects and, although it is currently illegal in Canada, it is incredibly prevalent and widely used (Stavropoulos, Mcgee, & Smith, 2011). Measures to reduce youth cannabis usage would be strengthened through promoting education and public awareness

campaigns intended to diminish conflicting messages and endorse health prevention/harm reduction strategies.

**Conflicting messages.** There has been conflicting information given, and Canadians seem to be unsure of the consequences of cannabis use. As Walker (2017) has indicated, Canadians who are in favour of legalization of cannabis argue that cannabis is relatively harmless, whereas opponents overinflate claims about the dangers of cannabis. Walker added that, although cannabis is not entirely safe, its risks have been grossly overstated and because of this, it is necessary that the legalization policy provides accurate and accessible cannabis knowledge. As Sarvet (2018) stated, “The perceived harmfulness of marijuana is frequently cited as one of the most important protective factors preventing use among adolescents” (p. 68). For this reason, whether legal or illegal, there is a need to implement health promotion and harm reduction strategies when dealing with cannabis. Above all, these strategies should avoid false scare tactics of earlier decades, and instead develop more effective ways to balance information regarding cannabis use (Carliner et al., 2017). This concept was explained further by Canadian Centre on Substance Abuse [CCSA], *National Research agenda on the health impacts of non-medical cannabis use* (2017):

The potential, particularly for youth, to hear “mixed messages” about cannabis use requires the development, implementation, and evaluation of a more nuanced set of health promotion and harm prevention messages and interventions to support people in their decision-making around cannabis use (p. 10).

**Health prevention/harm reduction.** There is a need to define desired outcomes for health prevention and harm reduction by identifying the key messages and communication strategies needed to enhance knowledge regarding immediate and long-term cannabis-related harm. Hathaway, Erickson, and Lucas (2007) explained drug use as an inescapable fact and, rather than viewing drug use as a moral issue, individuals should seek to reduce individual use and social costs rather than trying to eliminate all drug use. This would entail relaying information, promoting awareness, and providing health implications of cannabis use, rather than encouraging cannabis abstinence as the primary policy (Hall & Babor, 2000). As the CCSA, *Cannabis, driving and implications for youth* (2017) explained, young individuals often reported receiving prevention messages along the lines of “just saying no”. When providing youth with unbiased, evidence-based information on both the therapeutic benefits and consequences of cannabis use would be a better approach. Thus, it is important that the Canadian government designs and implements public policies to protect public health and educate the public about the potential consequences. This will be important in minimizing harm from this changing cannabis law. As Fischer et al. (2016) stated, “The principles of good public health orientated policy-making...should be applied consistently and proportionately on best available data, and not arbitrarily rest on selectively applied and emphasized evidence for risks or harms” (p. 13).

It is important to note that the following sections do not address if cannabis should be legal; rather it provides information on the potential positives and negatives regarding the legalization of cannabis. Whether legalization is positive or negative largely depends on regulatory decisions and how they are implemented (Caulkins, Hawken, Kilmer, &

Kleiman, 2012).

### **Advantages of Cannabis Legalization**

Cannabis legalization may prove to be quite beneficial, whether for the community or for Canada as a whole. This section will consider the benefits of promoting education, the possibility for Canada to receive profit/tax revenue, and lastly the likelihood that it will decrease criminal activity.

**Promoting education.** While even the best prevention programs are not particularly effective as noted above, cannabis legalization raises questions on how education initiatives should be addressed when individuals of a certain age are allowed to consume (Kilmer, 2014). Because of this, the federal government explained that their focus will be placed on harm minimization, social education, and maintaining public health and safety as central policy tenements. Canadian public health leaders firmly support cannabis legalization as a means to promote public health and safety (Webster, 2018). This would entail focusing on prevention and education regarding cannabis use risks rather than focusing on criminal prosecution (Fischer et al., 2016). Currently, young individuals rely on friends, drug dealers or on their own experiences to form an opinion regarding cannabis use (CCSA, 2017). Therefore, focusing on educating Canadians would provide helpful information to allow individual to make an informed decision regarding their own cannabis use. Since the decision has been made to change the cannabis policy in Canada, it is essential that the proper education platforms are in place and that the timing of these initiative have been determined, preferably, before stores are allowed to sell cannabis.

**Profit/Tax revenue.** Since about 80% of the cannabis market is driven by roughly

20% of past-year users who use on a daily basis or near daily (Caulkins et al., 2012), the government will have a strong incentive to create and retain heavy users. The profit accumulated through taxation will depend on how each province decides to tax cannabis. Each Canadian province can influence the retail price of cannabis through tax rates, but if taxes are set too high, users could turn to the black market for an untaxed and unregulated product (Caulkins et al., 2012; Caulkins, Andrzejewski, & Dahlkemper, 2013; Kilmer, 2014). This is seen with tobacco smuggling, for example, when taxes are set too high (Caulkins, Morris, & Ratnatunga, 2010; Government Accountability Office, 2011). There is a need for the right balance with regards to taxing cannabis and, if done right, it is anticipated that cannabis taxation, licensing, and industry could generate billions of dollars in government revenue. This money could be aimed at improving a number of programs in Canada, as was done in Colorado. For example, the revenue from cannabis in Colorado helped to fund government programs and public schools (Sullum, 2016). Right now, tax revenue projections are inherently uncertain and may need to be adjusted over time to find the right balance.

**Crime.** In the CPAC documentary: *Chasing the high, the politics of pot* (2015), individuals get their cannabis from the black market in which gangs grow and sell it illegally, feeding a black market that is said to be grossing around \$20 billion a year. With this comes smuggling of cannabis, crimes, murders, and potentially exposing innocent individuals to high risk situations (Cyrenne & Shanahan, 2018). Historically it was found that, following prohibition, the sale of illegal alcohol gradually decreased, and it would be assumed that the same would be the case for the black market selling illegal cannabis (Fischer et al., 2016). It was assumed by Fisher et al. (2016) that Canadian cannabis users



may prefer to rely on legal cannabis distribution that would offer quality products with pricing that is at least as competitive with the black market. Legalization of cannabis would hopefully undermine these illegal markets and protect young Canadians from associated risks, such as having contact with drug dealers that sell other types of drugs (Marie & Zolitz, 2017).

In the Government of Canada Discussion Paper: *Toward the legalization, regulation and restriction of access to marijuana* (2016), it is explained that criminal records resulting from cannabis charges have serious implications, including causing difficulties for finding employment and housing, and for being able to travel outside of Canada. Therefore, the policy for legalizing cannabis is likely to prevent individuals from entering the criminal justice system and receiving criminal records for simple marijuana possession offences.

### **Consequences of Cannabis Legalization.**

The consequences explained below will depend in large part on the exact stipulations and on the implementation, regulation, and practice of the cannabis legalization act in effect at both the federal and provincial levels.

**Increase in cannabis use.** Although it is anticipated that cannabis use levels may increase with legalization from the already existent high levels (Marie & Zolitz, 2017), the retail price of cannabis will contribute to what happens regarding consumption (Kilmer, Caulkins, Bond, & Reuter, 2010). It has been noted that users and potential users are sensitive to the price of cannabis where a 10% decline in price is likely to lead to an approximately 3% increase in cannabis participation (Gallet, 2014; Pacula, 2010). Therefore, depending on the price and greater accessibility to cannabis, it is anticipated

that it would be easier and more acceptable to use cannabis, possibly pushing more individuals to become consumers. Osborne and Fogel (2017) investigated the likelihood of an increase of cannabis use among both initial nonusers and users themselves. However, participants in this study indicated that their level of cannabis consumption would remain the same if legalized. In comparison, it is well known that an increase in alcohol availability has been associated with the increase in alcohol-related addictions. Given this, cannabis is already accessible in Canada, it is possible that the legalization and tightening of the cannabis market could lead to an initial increase in use among the general population and at-risk groups, specifically university students (Crépault, Rehm, & Fischer, 2016) but, as mentioned above, this can be influenced by taxation policies.

**Cannabis dependency.** Despite the debate regarding the addictiveness of cannabis, the literature clearly indicates that long-term cannabis use can lead to addiction, with approximately 9% of those experimenting with cannabis becoming addicted (Lopez-Quintero et al., 2011). In addition, this number increases for those who experiment with cannabis at a young age and those whose cannabis use is daily or near daily (Hall & Degenhardt, 2009). When referring to the DSM regarding the clinical diagnosis of cannabis dependency, about 8-10% of adults would be considered dependent on cannabis, 16% of adolescents would be considered dependent on cannabis, and 37% of young adults aged 18-30 would be considered dependent (Van Der Pol et al., 2013). During a period of abstinence, withdrawal effects can include milder cognitive and psychomotor impairments that can persist for weeks in frequent users (Bosker et al., 2013).

As a high-risk group, university students are at particular risk for using cannabis to cope, further heightening their risk of cannabis dependency (Simon, Gaher, Correia,

Hanson, & Christopher, 2005). Despite this, the vast majority of students with cannabis-related issues are not interested in receiving treatment to help them better manage their cannabis use (Buckner, Ecker, & Cohen, 2010; Caldeira et al., 2008). In contrast, for those who do seek substance abuse services, cannabis has been the most common substance of concern (Urbanoski, Strike, & Rush, 2005). It is stated by Sarvet et al. (2018) that “No one should make the mistake of believing that increased societal acceptance of marijuana will not cause drug abuse to increase among our children” (p. 68). Advocates of cannabis reform often argue that even though there is a possibility for heightened cannabis dependency, taxes accrued from legalizing cannabis can be used to fund prevention efforts (Kilmer, 2014).

**Academic consequences.** Cannabis use has been associated with academic noncompliance. For example, Lynskey, Coffey, Degenhardt, Carlin, and Patton (2003) followed a sample of 1,601 high school students and found that early and frequent cannabis use increased the risk of dropping out of school. This was also found among 1,003 university students in New Zealand, where early and frequent use was associated with lower rates of university degree completion (Fergusson & Boden, 2008). Even if individuals do not fail out, there are a number of academic consequences for using cannabis as a university student, including a higher rate of poor academic performance insofar as cognitive functions are strongly impaired by cannabis consumption (Volkow, Baler, Compton, & Weiss, 2014). Buckner et al. (2010) found that 67% of cannabis-using undergraduate university students reported experiencing at least one cannabis-related issue with regards to academic functioning, including procrastination, low energy, less productivity, memory loss, and missing classes (Buckner et al., 2010). For the high

frequency users (daily or near daily use) identified in the study, 67% reported issues with procrastination, 49% reported lower productivity, 41% indicated memory loss, and 33% with missing classes. These rates are concerning given that university students missing classes is related to having a lower grade point average (Bugbee, Caldeira, O'Grady, Vincent, & Arria, 2017). This finding was corroborated in Marie and Zolitz's (2017) research showing that a temporary restriction on legal cannabis access at Maastricht University in the Netherlands had a strong positive effect on course grades. These students performed better by .093 standard deviation, and were 5.4% more likely to pass courses when they were banned from entering cannabis shops. They concluded that students who lost their right to buy cannabis legally experienced performance improvements when compared to their peers who could still enter cannabis shops. A legal change in access to cannabis could have a strong impact in reducing personal productivity (Marie & Zolitz, 2017), with less time spent studying (Wolaver, 2002), fewer classes attended (McCabe, West, Teter, & Boyd, 2012) and fewer university activities being engaged in (Martinez, Sher, & Wood, 2008). Arria et al. (2013) also found that using cannabis can decrease a student's ability to pass academic courses, reduce the likelihood of continuous enrollment at university, and diminish prospects for graduating. Interestingly, Marie and Zolitz (2017) found that such consequences as lowered productivity and diminished success were found to be more pronounced for women than men and possibly due to a gender difference in responses to the legal status of cannabis. It was also found that individuals who do not consume cannabis had a small but significant increase in their intelligence score from age 13 to age 38, which was explained to be more significant the earlier and more intensively and persistently they used cannabis (Meier et

al., 2012).

**Health consequences.** Although cannabis can be used for therapeutic purposes, there are health consequences that can be associated with cannabis use, all depending on factors such as age and frequency of use. Caspi et al. (2005) suggest that heavier marijuana use and exposure at a young age can negatively affect one's health. As the cannabis policy shifts towards legalization, Volkow et al. (2014) hypothesize that the use of cannabis will increase and with that so will the number of health consequences due to widespread exposure.

With regards to age, longitudinal studies suggest that early onset of cannabis use is associated with a higher likelihood of a variety of problems. Due to the rapid changes in brain development of young individuals, they show more vulnerability to the impacts of cannabis use (Bava & Tapert, 2010). Until the age of 21 the brain is in what is referred to as the “developmental period” (Gogtay et al., 2004). During this period the brain is intrinsically more vulnerable than a mature brain to the adverse long-term effects of being exposed to tetrahydrocannabinol or THC, the main ingredient in cannabis (Volkow et al., 2014). Or may have at the least, adverse long-term outcomes that impose a substantial burden on individuals as they mature (Osborne & Fogal, 2017), thereby jeopardizing their prospects for educational, professional, and social achievements. This may explain the finding that frequent use of cannabis from an early age could lead to a decline in IQ (Meier et al., 2012). Early regular use of cannabis is also associated with low levels of educational attainment, diminished life satisfaction, and a higher prevalence of addiction issues (Volkow et al., 2014).

The frequency of cannabis use, especially high frequency use (daily or near daily

use), has been associated with a variety of cognitive, physical, and mental health consequences, some of which could lead to long-term deficits. For example, high-frequency cannabis use during adolescence has been linked to attention, learning, memory, and executive function deficiencies (Broyd, Van Hell, Beale, Yucel, & Solowij, 2016); respiratory issues (Brook, Stimmel, Zang, & Brook, 2008); and long-term cancer risks (Callaghan, Allebeck, & Sidorchuk, 2014). High frequency cannabis use has also been associated with a variety of mental health issues and poorer psychological health than those individuals who do not use marijuana (Degenhardt et al., 2013). There also has been research suggesting a link between young individuals' cannabis use and depression, anxiety, externalizing disorders, and suicidality (Horwood et al., 2012).

Substantial evidence has demonstrated a positive relationship between high-frequency cannabis use and schizophrenia (Lynch, Rabin, & George, 2012), especially for those who have a predisposed vulnerability to a psychotic disorder (Radhakrishnan, Wilkinson, & D'Souza, 2014). The role of frequency was observed by Moore et al. (2007) to be a factor in their meta-analysis which confirmed an association between cannabis use and the risk of psychotic symptoms. For at-risk individuals Caspi et al. (2005) found that high cannabis frequency can advance the time for having a first psychotic episode by 2 to 6 years. Cannabis abuse has also been found to contribute to the onset of bipolar disorder (Strakowski & Cerullo, 2007). Cannabis use may decrease the age of onset of these disorders. This was further verified in a study conducted by Ongur, Lin, and Cohen (2009), showing that lifetime high-frequency cannabis use is associated with on average a three-year earlier age of onset of schizophrenia or bipolar disorder. The prevalence of cannabis abuse among patients of first episode psychosis is particularly

high, ranging from 13% (Hambrecht & Hafner, 2000) to 75% (Van Mastrigt, Addington, & Addington, 2004). Hickman et al. (2009) have estimated that preventing 9000 people from using cannabis would prevent 1 case of schizophrenia. Clearly, many factors must align for an individual to develop a psychiatric illness or schizoaffective disorder, including genetic tendencies or a propensity toward addiction (Moore et al., 2007).

The Newfoundland and Labrador Public Engagement Division report (2017), *legalization of cannabis: Public stakeholder engagement* indicated that the most common concern around legalization was the potential impact for health, particularly concerning mental health and addictions, especially among the youth in the province. A large proportion of cannabis users in Canada are adolescents or young individuals and, because of this, they are more vulnerable to sustaining long-term or persistent cannabis related harm, including health consequences, impaired social and educational development, and increased chronicity of cannabis use (Leyton, 2016). In the face of cannabis legalization, there is a need to determine the readiness of the health, mental health, and addictions services to respond to individuals with cannabis use disorder. Wilson-Raybould et al. (2016) advised that the federal government is legally regulating cannabis, in part because of these health risks associated with cannabis use, not despite them.

**“Gateway drug”.** It is essential to consider the health and psychological development of young individuals in this country, and that cannabis can be regarded as a gateway drug, leading to the use of harder, more dangerous drugs (Morral, McCaffrey, & Paddock, 2002). Cannabis is frequently used together with other addictive and psychoactive substances, including illicit drugs such as opiates and cocaine (Fergusson, Boden, & Horwood, 2006; Lynskey et al., 2003), making it difficult to detect the

dependence of cannabis use and the process of dependence development for cannabis from those of other substances. It has been suggested that the use of cannabis early in ones' life could influence multiple addictive behaviours in adulthood. This view has received considerable support from studies in animals. For example, Dinieri and Hurd (2012) experimented with rats and proved that early exposure to THC can recalibrate the sensitivity of the reward system to other drugs. Extrapolating with caution to humans, this could help explain the increased susceptibility to drug abuse and addiction to harder drugs later in life, which has been reported in several studies (Agrawal, Neale, Prescott, & Kendler, 2004).

Although the above findings support the notion that cannabis can be categorized as a gateway drug, it is contended that the majority of individuals will never progress to harder drugs (Hall & Lynskey, 2016). Volkow et al. (2014) explained that individuals who are susceptible to drug-taking behavior are simply more likely to start with cannabis, and accessibility and social interactions with drug users would increase the probability of them trying other drugs. Other studies, including research conducted by Osborne and Fogal (2017), found that the majority of participants in their study did not think that cannabis use contributed to their use of other drugs. Stone and Kennedy-Moore (1992) explained that students who reported a strong motivation to use alcohol or drugs to cope with stressful events showed a substitute relationship among alcohol and cannabis, whereby the more they drank, the less likely they were to use cannabis. Room (2010) also explained that most individuals who use cannabis do not use other illegal drugs, and one cannot assume that cannabis alone increases the likelihood that a person will progress to using other illicit substances. Studies conducted in universities where cannabis is legal



proved that students did not significantly change their use of tobacco, alcohol, or illicit drugs simultaneously with cannabis legalization (Miller, Rosenman, & Cowan, 2017).

**Driving under the influence.** At high doses, cannabis is a well-established risk factor for motor vehicle crashes (Drummer et al., 2004). Recent use of cannabis and blood THC levels of 2 to 5mg per milliliter are associated with substantial driving impairments. This involves distorted perceptions, impaired concentration, increased drowsiness, interference with memory and with the ability to divide attention, while also impairing coordination and balance which, all combined, can lead to accidents and fatalities when driving (Desrosiers, Ramaekers, Chauchard, Gorelick, & Huestis, 2015). Berning, Compton, and Wochinger (2015) found that, in 2007, 12.6% of weekend nighttime drivers tested positive for tetrahydrocannabinol and that by 2013-14 there was a 48% increase. The Canadian Centre on Substance Abuse [CCSA], *Cannabis, driving and implications for youth* (2017) noted that among all drivers killed in motor vehicle crashes in Canada between 2000 and 2010, 16.4% tested positive for cannabis. Detecting cannabis use is most effective by a blood test, but it also can be identified by an odor in the vehicle, dilated pupils, eyelid and leg tremors, lapses of attention or concentration, and red eyes (CCSA, 2017). These signs can be identified and are enough for police officers to demand a Standard Field Sobriety Test (SFST).

Cannabis is the most common illicit drug found among young drivers who die in crashes in Canada (CCSA, 2017), which could have been the result of their high rate of cannabis use combined with their inexperience in navigating the complex demands of driving. In the same study, the high rates of motor vehicle use following cannabis use among Canadian youth was associated with the fact that these individuals do not believe

that cannabis impairs their ability to operate a motor vehicle. The view was expressed that designated drivers “only smoke weed” at parties instead of drinking as it was believed it to be less impairing. This suggests a lack of knowledge and education around the topic, and that there is a need to help young individuals make better-informed decisions to reduce their risk of getting into a motor vehicle while high. They need to understand that cannabis has been found to interfere with information processing, decision making, sustaining attention, and that it would be expected to have particularly significant adverse effects on those who are still acquiring the skills and experience needed to operate a motor vehicle safely (CCSA, 2017). Although there will be proposed limits for blood levels of tetrahydrocannabinol in drivers and stronger penalties for impaired driving, there is still a significant concern that the legislation of cannabis will result in an increase in impaired driving, particularly among young people and in conjunction with alcohol use (CACP, 2017).

While clearly, negative effects of cannabis have been reported for driving while using cannabis, it is still a heavily debated issue. Colorado, for example, has seen a 15% decrease in alcohol-related traffic fatalities in the three years’ post-legalization (Anderson, Hansen, & Rees, 2013). While considering this information, there is still evidence that cannabis adversely affects the ability to drive safely, and doubles the risk of being involved in a severe traffic crash (CACP, 2017).

### **University Students’ Perceptions**

Cannabis use among university students has increased in daily use, and interestingly, students’ perceptions of harm associated with cannabis use have decreased, whereby 35.1% of students today perceive regular cannabis use as harmful, compared to

57.2% a decade ago (Johnson et al., 2015). The Canadian Centre on Substance Abuse [CCSA], *Cannabis, driving and implications for youth* (2017) indicated that there are three misconceptions about cannabis held by young individuals. The first misconception pertains to cannabis addiction. While study participants acknowledged that people become “grumpy” or “agitated” on stopping cannabis use—common symptoms of addiction and withdrawal—they still tended to believe that heavy cannabis use would not lead to withdrawal symptoms. As one participant stated, “cannabis is a plant and is natural, therefore it is safe” (p. 2). The last misconception expressed was that the effects of cannabis depend on the individual, having more to do with the person and his or her attitudes about the drug itself. Hence, they can justify smoking cannabis occasionally and being in a vehicle driven by someone who has used cannabis. These misconceptions of cannabis could be the reason why daily cannabis use is so high within Canadian universities, considering that about one-third of students reported the use of cannabis annually (Johnston et al., 2015). Of these students, 25% would meet the criteria of a cannabis disorder (Caldera et al., 2008).

There are three presenting factors for why young individuals use cannabis, including the influence of friends, perceived availability, and lastly, stress and mental health management (CCAS, 2017). It was indicated that peers have the most significant impact on the use of cannabis, taking the position that cannabis use must be acceptable if peers are using it. It was also explained that cannabis use among young individuals is dependent on the availability of the drug and on whether or not it is easy to obtain. For individuals, dealing with a mental health issue such as anxiety, depression, or post-traumatic stress disorder, it was regarded that cannabis could be used as a source of relief.

Bergamaschi et al. (2011) reiterated that young individuals use cannabis to cope with stressful situations and to treat their mental health issues, as it has been a primary source of tension-reduction or self-medication.

Data from recent surveys indicate that among young individuals, their perceptions of cannabis are becoming more positive. Public opinion on the legalization of cannabis in Canada has shifted considerably in the last decade. Ten years ago, about half of Canadians believed cannabis should be legalized and today around two-thirds of Canadians are in agreement with legalization (National Post, 2013). It appears that past cannabis users are more in favour of legalization than non-users, with individuals having personal experience of cannabis use tending to regard the pros of legalization as being more important than the cons (Van Ours, 2012).

Cannabis use, attitudes towards use, and attitudes toward legalization have been correlated with age, where younger individuals are more likely to use and view cannabis in a more favorable light (Alfonso & Dunn, 2007). This is not surprising, as the relationship between age and deviant behaviours has been well researched and documented. Osborne and Fogel (2017) found that 90% of their participants were in favor of legalization of cannabis, compared to the remaining participants who were in favor of continued criminalization, or else had no opinion. It has also been found that students strongly believe that using cannabis would help them fit in with their friends, feel relaxed, forget their worries, and enjoy themselves (O'Callaghan & Joyce, 2006). For this reason, they are at particular risk for using cannabis to cope with life issues, heightening their risk for having substance abuse issues (Park & Levenson, 2002). A near majority of participants in the Osborne and Fogel (2017) study indicated that it was unjust to maintain

cannabis legalization when other harmful substances such as alcohol and nicotine are more dangerous and are legal in Canada. Young adults expressed that cannabis should not be considered a drug, in contrast to heroin or cocaine (Menghrajani, Klaue, Dubois-Arber, & Michaud, 2005), and favored more relaxed laws on cannabis, preferring that Canada regulate cannabis more like alcohol (Hathaway et al., 2007).

### **The Need for Research and the Current Study**

As mentioned above, cannabis is the most commonly used illicit substance among university students, where the percentage is higher than any other age group (Adamson et al., 2013). The current literature focuses on cannabis use among adolescents, particularly high school students. Little research focuses on university students' perceptions towards the legalization of cannabis in Canada and the impact it may have. While previous research has done well finding the frequency of cannabis use and related health effects of cannabis, there is a paucity of knowledge regarding students' perceptions with respect to cannabis legalization.

With the legalization of cannabis in Canada being imminent and with the current high rates of cannabis use in university campuses, there is a need to better understand the perceptions and views of the highest consumers (Kalant, 2016). Having insight into university students' perceptions around the legalization of cannabis in Canada would be useful and informative for a diverse audience, including policy makers, program developers, parents and educators. These stakeholders should all be advised of students' perceptions of the possible implications of the legalization of cannabis for university students in Canada. This research seeks to give voice to this group underlining the argument that university students' have an important role to play in debates of how it may

impact university life.

### **Research Questions**

In conducting this research, I sought to understand undergraduate students' perceptions regarding legalization of cannabis. There is a need to present university students' perceptions of legalization of Cannabis with regards to perceived rates of use, academic outcome, availability/access, and how it may impact university life for students after legalization is enacted.

The main research question in this study was:

- 1) What are university students' perceptions of legalization of cannabis in Canada?

The study also included three sub research questions:

- 1a) How might legalization impact cannabis use for university students?
- 1b) What are university students' perceptions on how legalization may affect academic performance?
- 1c) What are university students' perceptions on how legalization will impact mental health issues on campus?

## **Chapter 2: Methodology**

In this chapter, I review and justify my choice of methodology as well as the specific methods used in this study. I will discuss the purpose and goals of my research and why the chosen generic qualitative research methodology was fitting for this research. I will also discuss the chosen methods that included sampling, recruitment, data collection, data analysis, and relevant ethical considerations.

### **Methodology**

#### **Purpose**

The purpose of this research was to understand undergraduate students' perceptions of legalization of cannabis in Canada at Memorial University of Newfoundland. Investigating students' perceptions is necessary because one-third of university students reported annual use of cannabis (Johnston et al., 2015). The legalization of cannabis in Canada will ultimately make it the biggest jurisdiction in the world to freely allow consumption of cannabis, yet the impact that this may have on university students is unpredictable (Collier, 2017). With this in mind, university students are an important group of potentially at risk individuals, yet little research has been conducted on their perceptions of legalization of cannabis. Most of the research focused on the age of the user, frequency of use, and related health effects (Von Sydow, Lieb, Pfister, Hofler, & Wittchen, 2002). Research has consistently reported that cannabis use is clearly widespread among university students (Johnston et al., 2015; Mohler-Kuo, Lee, & Wechsler, 2003), but yet their perspectives are rarely heard. As Briggs (2015) argued, giving students' an opportunity to voice their perceptions is "one of, if not, the most

important” key to understanding the potential impact of policy change (p. 310).

Thus, a qualitative research approach was used for this study because qualitative methods are especially useful in discovering the meaning that people give to events that they experience (Merriam & Tisdell, 2016). The qualitative research methods used for this study is described further below and included purposeful sampling, open-ended interviewing, and a systematic and concurrent data collection and analysis procedure. Specifically, a generic qualitative research approach was used to analyze this data and discover the meaning of university students’ perceptions of cannabis legalization in Canada.

### **Generic Qualitative Research Approach**

This study utilized what Merriam refers to as generic qualitative methodology (Merriam, 2009; Patten, 2015). A generic qualitative research approach is not guided by any established qualitative methodologies, such as grounded theory, phenomenology, ethnography, narrative research, or case study (Creswell, 2015). Rather, Merriam and Tisdell (2016) referred to this approach as “basic” qualitative research. Weinberg (2002) explained that established qualitative methodologies cannot, in reality, fit all empirical studies. Although this generic qualitative approach is not based on any established qualitative research methodology, it still has a logic which should be followed but with flexibility (Caelli, Ray, & Mill, 2003). Hence, researchers often choose this generic qualitative approach because of its flexibility.

In this study, the generic qualitative research approach was selected for three reasons, the first being its flexibility. Initially, no matter what traditional qualitative approach was adopted for this research, it would likely fall short of meeting the research



objectives. Hence, a generic qualitative approach was deemed suitable due to its flexibility in allowing the frequent and important themes from the data to emerge and other associated research findings without it being limited by the restrictions of a traditionally established qualitative methodology. Thomas (2006) confirmed that this approach is more flexible than other approaches, helping to build clear connections between research objectives and research findings. This approach was also deemed appropriate for my level of research experience compared to other qualitative approaches such as phenomenology, which would require a specific kind of expert-level understanding and application.

The second reason for choosing this generic qualitative approach was due to its interpretive nature that fitted the research focus. Cooper and Endacott (2007) explained that this generic approach is descriptive and seeks to discover and understand the topic, process, perspectives, and world views of the participants. Therefore, since my goal was to understand students' perceptions on cannabis legalization, I needed a research approach that would fit the qualitative research questions and this approach was deemed suitable.

The third reason for choosing this approach was to align with my mode of research. According to Thomas (2006), generic qualitative research condenses the data into a summary format, establishes links between the research objectives and the summary findings, and lastly, structures participants' experiences and perceptions into text data. Similarly, the present research had the same purpose of summarizing students' perceptions into important themes to eventually make connections between the research aim and these themes.

With this approach being under the umbrella of qualitative research, it is appropriate to consider further the reasons behind selecting this methodology.

### **Qualitative Research Approach**

**Participant perspectives.** A qualitative approach is said to be best for seeking to understand a phenomenon, a process, or the perspectives and worldviews of the participants involved (Auta, Strickland-Hodge, & Maz, 2017). The current research is grounded in individual data through interviews and is designed to study the “experiential life of people” (Polkinghorne, 2005, p. 138). It is well known that when researchers aim to interrogate a social phenomenon and to seek a deeper understanding of individuals’ perceptions or behaviours, qualitative research methodologies are often used. Therefore, this approach was appropriate for this study due to focusing on thoughts, opinions, and perspectives of participants while also focusing on content that is driven by reflection and subjective description.

With this information, a qualitative approach was deemed best suited for answering my research questions and exploring the perceptions of students regarding legalization of cannabis in Canada. In conducting this research, an emphasis was placed on the participants’ own words as generative of meaning and knowledge. Therefore, due to the flexible nature of qualitative studies and the ability to modify questions based on responses provided, a more detailed description of the participants’ perceptions evolved. For example, when I asked “How do you think the government should address cannabis in Canada?” I could prompt the participant with queries such as, “Status quo, legalized for medical use, legalized for recreational use, or decriminalized?” Depending on the detail of the answer given, I could prompt to obtain more detail. This provided rich, detailed

interviews that informed the overall study objective.

**Emphasis on detail.** Qualitative research explores and investigates a theme through individual experiences. Cohen, Manion, and Morrison (2002) explained that research findings are not conclusive and do not reveal ultimate truth, but help researchers make sense of the world through explanation and clarification. This methodology is considered to be “superior to other research methods for achieving in-depth understanding of complex organizations, such as colleges and universities, and complex processes, such as student learning or change” (Whitt, 1991, p. 407). As such, to receive this “in-depth understanding” Patton (2015) stated:

Quality has to do with nuance, with detail, with the subtle and unique things that make a difference between the points on a standard scale. Qualitative descriptions provide the detail to explain what the lives of two different people are like.... answers to such questions require detailed, in-depth, and holistic description that represent people in their own terms (p.110)

Qualitative research provides depth and richness to the findings that included verbatim quotes to illustrate the themes, as well as detailed descriptions that participants would provide. For instance, when questioning participants regarding advice that could be given to the university, it was essential that the participants were given the latitude to fully explain their opinions, providing an outlet for their voice to be heard.

The research question for this study centered on the perspectives of students regarding legalization of cannabis in Canada. Understanding the participants’ points of view and allowing their voices to be heard requires that qualitative methods, specifically interviewing, be utilized to answer the research questions. This approach offered the

flexibility needed to permit for greater spontaneity and adaptations of the interaction during each interview. Choosing this methodological framework laid the basis upon which I utilized specific methods. These included recruitment, sampling, data collection, and data analysis, each of which will be discussed further in the next section.

## **Methods**

This section discusses the specific approaches and techniques used for collecting and analyzing the data, and how these constitute an integrated strategy. As mentioned previously, my research followed a generic qualitative methods approach; hence, I chose to conduct semi-structured interviews where I was very involved as the researcher. This included choosing a recruitment plan, the specific sample characteristics, and sample size, while also spending many hours analyzing interview data and organizing the data into themes.

### **Participants**

**Recruitment.** Undergraduate students attending Memorial University of Newfoundland were recruited for this study. The strategies used to facilitate recruitment included distributing a hardcopy recruitment poster (Appendix A) in the QEII library and the G.A Hickman building at Memorial University. Due to a high degree of interest in participating in this study, I did not need to distribute the recruitment poster in other buildings. The recruitment poster outlined the topic of research, inclusion criteria, incentive, time required to participate, while also including the researchers' email addresses for students to use if interested in participating in the study. Participants who were willing to participate in an interview emailed the researcher and arrangements were

made that were convenient for them.

**Sampling.** As the purpose of this study was to obtain a better understanding of students' views on cannabis legalization, purposeful sampling was best used. Purposeful sampling is a type of non-probability sampling strategy that considers cases based on a variety of criteria and a range of situations to maximize the sample variation (Gobo, 2005). This sampling approach allowed specific participants, a setting, and particular events to be chosen for the rich information that may be provided which might not readily be established by other means. Consistent with its main goal, purposeful sampling targets specific participants to represent a central phenomenon (Creswell, 2015). Hence, I sought out participants that had certain characteristics of the population of interest that would best enable the researcher to answer the research questions (Palys, 2008). Therefore, in order to directly address the research questions, this study interviewed those individuals who were informed on the topic that this study focused on.

The applied selection criteria for participants in this study included: (a) attending Memorial University in the current semester (Winter, 2018); (b) having a well-informed perspective on cannabis use; and (c) being comfortable with communicating in the English language. These criteria attracted a large number of undergraduate students from diverse backgrounds, cultures, and ethnicities. Many students were well aware of the imminent law changes in cannabis, and had their own perceptions regarding this topic. Flick (2007) noted that it is important that researchers select participants who best represented typical, or the most developed, cases, for studying a phenomenon. Therefore, I chose those participants expressing interest in this research topic and who would help generate a more complete and representative understanding of students' perceptions

regarding the legalization of cannabis in Canada.

**Sample size.** Qualitative research endeavors to provide an in-depth picture of the topic of interest, and as Patton (2015) expressed, “there are no rules for sample size in qualitative inquiry” (p. 311). Before starting my research, I aimed to interview between six and twelve participants, as the intent of a qualitative study is not to generalize to a population, but rather, developing rich information of the phenomenon in question and of those who would be directly affected (Creswell, 2015).

Due to the depth and length of my interviews, a significant and sufficient amount of data had been obtained after eight interviews. I had obtained saturation and redundancy after these eight interviews, and as Maxwell (2005) explained, saturation is the main principle in qualitative research that helps guide the sample size. In other words, data collection ended in this research when it was felt that little information or additional insight could be obtained from the data. Although it was explained that true redundancy cannot truly be achieved due to each participants’ unique experience (Morrow, 2007), this smaller sample allowed a compilation of the necessary data needed to provide an in-depth picture of the phenomenon in order to answer the research questions.

### **Role of the Researcher**

In qualitative research, researchers have a big part to play, as they themselves are the instruments for data collection. They ask participants broad, general questions, collect information, and then analyze it for description and themes (Creswell, 2015). As the interviewer, I administered all interviews and was actively involved in the full process. I was involved in the interviews for each participant, examined results, and identified patterns and themes to interpret the meaning of the interviews. As Maxwell (2005)

explained, researchers are expected to observe, interact, and also record the findings.

Thus, the research is guided, and heavily instructed, by the researcher.

As the interviewer, I was understanding and willing to listen to participants' responses regarding their perceptions. This helped me to facilitate rapport. In addition, when interviewing the participants, I was aware of having previous interviewee perceptions in my mind, but was careful not to impose them when asking questions. I was attentively listening to each participants' responses while also moving the conversation towards certain topics to allow for more insightful, stronger findings.

Not only was I involved in each interview but I also set up the audio-recorder to record each interview, analyzed the information, compiled a case for each participant, and selected appropriate quotes from interviews to be included in this thesis. I also examined results and identified patterns and themes to interpret the meaning of the information. A detailed description of the full analysis process is further explained below.

### **Data Collection**

This section will explain the process of data collection, specifically how the semi-structured question design was planned and applied; the chosen site to administer each interview; information regarding the interview process; and the pseudonyms applied to each participant.

**Semi-structured question design.** When designing the semi-structured questions, I wrote down research questions specific to students attending a university. My supervisor reviewed these and helped shape them by ensuring that the proper probes were being asked that would help participants to elaborate on their ideas so as to elicit more detail. Each interview started with questions regarding demographics of the participants that

were essentially warm-up questions that participants could answer easily to establish initial rapport. This allowed participants to feel more at ease, thus making the rest of the interview flow more smoothly.

I ensured that my interview questions were appropriate for being able to answer the research questions and to leave each participant feeling empowered and important. For example, nearing the end of each interview, each participant was asked to offer opinions or advice on legal cannabis on campus. This helped provide closure for each interview, and leaving each participant feeling more empowered.

**Site selection.** Undergraduate students who were interested in participating in the study contacted the researcher to establish a mutually convenient time in a private location in the G.A Hickman building of Memorial University. This location was free of distractions and was comfortable and inviting for the participants in their natural environment in the university. As Creswell (2015) explained, the site location must be a quiet, suitable place for conducting the interview. Due to the possibility of being disturbed by other students or by a lecture beginning, I contacted the Faculty of Education to request a board room. This was a quiet, suitable place for conducting each interview and provided a coded lock that was free from noise and interruptions, which was essential when audio-recording.

**Interviews.** As mentioned above, I conducted one-on-one semi-structured interviews to answer a series of open-ended questions about participants' perceptions regarding the topic at hand. Semi-structured interviews allowed for flexibility to elicit rich, detailed information while also incorporating probes when necessary to obtain further information or clarification when needed. Each interview was audio-recorded,



with the permission of the participants. This allowed for an accurate recording of each conversation. The interviews were planned but still flexible, as they were modified based on the students' spontaneous responses. During some interviews, probing was added to allow for deeper discussion and to obtain additional information (Whitt, 1991)

Initial interview questions were developed from the research questions and my knowledge about the phenomena. As mentioned, the interview began by asking demographic questions, concerning age, year of study, and academic degree major. As Creswell (2015) noted, qualitative interviews are open-ended and depth-probing and often may seem like a conversation, whereby the agenda is not explicit and emerges freely. These in-depth interviews provided better access to participants' perspectives, attitudes, and feelings through natural conversation, allowing for a rich, complex picture to emerge. Willis (2007) described semi-structured interviews as a way to encourage interpretation, interruption, improvisation, and other less-rigid styles of seeking understanding of participants' experiences and worldviews. Compared to closed-ended questions that place boundaries on information that can be obtained, open-ended questions can obtain participants' unique perspectives (Merriam, 2009).

Each audio-recorded interview, conducted in person, lasted between 45-60 minutes. These interviews were one-on-one where I asked questions for the purpose of learning about the participants' views. Participants each received a \$25 Visa gift card for their participation. The interviews were semi-structured with a set of possible questions that were prepared prior to the interview (Appendix C) being used to guide each interview; the prepared questions themselves did not prescribe the order or wording of the questions. It has been advised by Creswell (2015) as well as by Patton (2015) that it is

essential to have a plan when interviewing participants, but to be flexible enough to follow a conversation with an interviewee, and this is what I strived to do. The structure imposed on each participant did vary depending on the amount of insight provided by the participants, as some were more talkative than others, therefore questions were sometimes asked verbatim while some questions were not asked at all. With this in mind, each interview developed differently, taking different directions to acquire the information needed for this research study.

It was emphasized by Patton (2015) that, due to interviewing being an interpersonal, it is imperative to work on building rapport, being nonjudgmental, listening well, and building a trusting relationship. As a counselling psychology student, this seemed second nature to me, as I have received much training in knowing how to build rapport, while also ensuring that the proper techniques were incorporated that would offer thick description. This included implementing open-ended questions that allowed for a conversation where I was able to share experiences on occasion in order to build rapport.

**Participant pseudonyms.** Due to confidentiality being of utmost importance, participants were advised that they may choose to use a pseudonym during the audio-recorded interview in order to maximize the protection of their identity. As each participant in this study chose not to use a pseudonym, I advised that their participation in this study would nevertheless be completely confidential and all published data would be anonymized. When analyzing and reporting the results, I randomly chose pseudonyms for each participant and only included information that would not reveal any of the participants' identities.

## **Data Analysis**

This section will explain the data analysis procedure that was applied in this research. This included the transcription of data, incorporating on-going analysis, and lastly, rudimentary analysis where I double-checked participants' answers and immersed myself into the data.

**Transcription.** Each interview was audio-recorded with the permission of the participants, and then tapes were transcribed verbatim by this researcher for data processing. During this stage of processing, some time was spent double checking each participants' answers and reading them through repeatedly. This enabled me to gain familiarity with the collected data and obtain a preliminary impression of some important categories.

Each interview was transcribed in chronological order as each was completed to avoid the possibility of getting overwhelmed with transcribing after the research was completed. Also during this stage, I transcribed all words and types of words to indicate when interviewees took a break in their comments. As Creswell (2015) suggests, these breaks can provide useful information, and transcribing all words will provide comprehensive data that capture the details of an interview.

**Ongoing analysis.** After each interview was completed I would take the data and compare it to emerging categories, such as, "*Promoting Education/Awareness.*" Merriam and Tisdell (2016) defined this as "constant comparative method" where the researcher would begin with "a particular incident from an interview" and compare it with "another incident in the same set of data" (p.159). This enabled me to reflect on past interviews and improve in the subsequent interviews. For example, during my first interview I could

have probed the participant to gather more information on a certain topic. Knowing this, I was also able to pinpoint emerging categories in following interviews and probe when needed, allowing for detailed, rich interviews to emerge.

Creswell (2015) explained that conducting qualitative research is about putting oneself in another person's shoes and seeing the world from that person's perspective; the most important part of data analysis and management is to be true to the participants. Thus, for each interview I tried to increase my awareness of this by keeping a journal throughout the data collection and analysis process. I would write notes with regards to my thoughts, and how each participant presented themselves throughout the interview. This was helpful and provided information that could possibly have an impact on the data analysis, while also presenting an outlet for me to discuss my own biases and challenges as a researcher.

**Rudimentary analysis.** As was mentioned above, after completing each interview some time was spent double-checking the answers and reading them to ensure accuracy in the transcripts. As Agar (1996) suggests, researchers should “immerse [themselves] in the details, trying to get a sense of the interview as a whole before breaking it into parts” (p. 103). After each interview, I reflected on the perspective takes, while also making notes with regards to salient contributions as well as connections between interviews.

### **Coding/Categorizing/Themes**

In terms of the generic qualitative approach used in this study, Thomas (2006) explained that the data analysis procedure involves coding information into categories and developing categories into a framework or a model. This framework is then summarized into raw data that conveys key themes. This section will explain the process

of coding and categorizing, and the themes that were established to explain the research results.

**Coding.** Merriam and Tisdell (2016) defined coding as “nothing more than assigning some sort of shorthand designation to various aspects of your data so that you can easily retrieve specific pieces of the data” (p. 173). After reviewing each transcript, I started the coding process to help develop a more general picture of the data and to facilitate comparison between each interview. This process, according to Corbin and Strauss (1990), adds a dimension to our understanding of the emerging structure of the phenomena in question. To accomplish this, all of my interview transcripts were printed out and then coded by hand. Creswell (2015) explained the coding process as a time to make sense out of the data, where the researcher will divide information into text or images, label the segments with codes, examine the codes for overlap and redundancy, and then put these codes into broad themes. During this phase, I immersed myself into the data, which allowed me to recognize the recurrence of ideas. I utilized both keywords and symbols and sometimes broke down certain codes into sub-codes to categorize even further. This resulted in multiple codes and themes, allowing for a comparison of categories and themes to take place. As Maxwell (2005) explained, coding is not to produce counts of a thing, rather to rearrange the data into categories that facilitate comparison between multiple categories. These categories can be derived from existing material that is generated during the research (Merriam & Tisdell, 2016). Therefore, I used codes that were generated in early interviews and used them for subsequent interviews by ensuring that they were touched on during each of the interviews so as to build on the most important categories.

**Categorizing.** This is where a researcher groups together the coded segments, in order to reduce the number of different pieces of data in the analysis (Merriam & Tisdell, 2016). These categories are developed from the coding, as was explained above. After the coding process in this study was completed, I starting drawing together codes from one or more transcripts to start presenting the findings in a coherent and meaningful way. As Maxwell (2005) suggested, “such categorizing makes it easier...to develop a general understanding of what is going on, to generate themes and theoretical concepts, and to organize and retrieve your data to test and support these general ideas” (p. 237). This allowed me to discover similar themes within each interview and to generate insight into the topic at hand. These themes were connected and permitted a reflection on the main ideas and perceptions that were conveyed regarding legalization of cannabis.

**Themes.** This is a higher-level of categorization, usually used to identify a major element in the content analysis (Creswell, 2015). When data saturation is achieved, themes can be developed. In the present research, I was able to reduce any overlap and redundancy amongst the themes and to be left with three chapters exploring the appropriate themes. Chapter 4 provides four themes including Perceptions of Change in Cannabis Law, Perceived Benefits of Cannabis Legalization, Perceived Negatives of Cannabis Legalization, and Students’ Perceptions of Cannabis in Relation to Other Substances. Chapter 5 lists seven themes including, Perceptions of Students’ Current Cannabis Use; Patterns of Cannabis Use When Legalized; Will Cannabis be a “Gateway Drug” for Students; Perceived Impact on Academics; Perceived Impact on Relationships; Perceived Impact on Mental Health; and Perceived Impact on Physical Health. Chapter 6 includes these three themes: Perceived Impact of Cannabis Legalization in Universities;

Implementing Rules on Campus; and lastly, Promoting Cannabis Education.

### **Trustworthiness and Credibility**

Trustworthiness of a study refers to the degree of confidence in data, interpretation, and methods used to ensure quality of a study (Connelly, 2016).

Trustworthiness in qualitative research is critical to the usefulness and integrity of the findings (Cope, 2014). During this research, I took the appropriate measures to manage subjectivity by increasing and making sure this study was trustworthy and credible through reflective journaling, repeated listening to audio-recordings, supervisor debriefings, and external auditing.

As mentioned previously, I used a journal to convey my personal reflections on that which could possibly have had an impact on the analysis procedure. Creswell (2015) explained that this process should also reflect biases, values, and assumptions. Being reflective permitted me to make notes on what should be guarded against regarding subjectivity during the process of analysis. For instance, it is possible that I could have had a certain bias response to participants who explained previously using cannabis and having their own medical license for cannabis. I wrote about my biases and feelings in a journal that provided a safe place where I could record my perceptions. I also utilized the journal for recording ongoing thoughts about conducting the interviews. This included recording what it was like interviewing certain participants, their demeanor and body language. Overall, writing in a journal allowed an outlet for reflection and to facilitate being able to leave my own biases and perceptions aside.

Although I did not “member check” which involves taking the findings back to the participants and asking them about the accuracy of the report, I did spend time

observing data through repeated careful listening to the audio-recordings and making appropriate changes when indicated. As with checking back with participants, this procedure was also an effective way of ensuring that the transcripts were accurate, and that the resultant interpretations were representative of each participant's interview.

After the initial interview was completed, I spoke to my supervisor to ensure if there were any questions or concerns, to prevent the possibility of any ethical issues. In addition, I also incorporated an external audit, in which I had an individual outside of the study review different aspects of the research and report back with regards to the strengths and weaknesses of the report. I consulted with my supervisor on the results of each audit and made the appropriate changes as needed.

### **Ethical Considerations**

All documents used in this study have been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University. The informed consent form followed Memorial University's template to ensure the inclusion of necessary information. Participants were informed about a wide variety of information such as what the research involves, risks and benefits, withdrawal protocols, data collection and storage, confidentiality, anonymity and privacy concerns.

The consent form was presented to each participant, explaining that their participation was voluntary and that they could withdraw from the study at any time. They were also informed that they could withdraw their data from the study following participation in the interview up to a set date for data aggregation. A signed signature was obtained from each participant after the consent form was presented. A copy of the consent form was also given to each participant for their records. This ensured that there



was no deception on my part as the researcher when explaining this form. As Punch (1986) stated, “the subjects of research have the right to be informed that they are being researched and also the nature of the research” (p. 35).

Participants were advised that their personal information would be safeguarded, including their identities, personal information, and data from unauthorized access, use, or disclosure. During analysis of the data, all information was anonymized and identified by pseudonyms. Since all transcripts were coded by hand, I ensured that they were safely printed in my home and that all material was kept confidential. Audio recordings and transcripts were stored as encrypted files on the researcher’s password-protected computer. Any identifying information was removed from the transcripts. This researcher and her supervisor, Dr. Greg Harris, will be the only individuals with access to this data. Data will be kept for a minimum of five years as required by Memorial University’s policy on Integrity in Scholarly Research, where it will be stored in Dr. Harris’s office and later removed and deleted.

### **Summary**

In this chapter I explained and justified my choice of methodology, specifically generic qualitative research methodology, and why this was a fitting approach to take for this research. I also explained my chosen methods with regards to sampling, recruitment, data collection, and data analysis. These procedures were important and necessary to explain in detail so that this study would be viewed as worthy of consideration by readers.

### **Chapter 3: Results - Overview and Participant Information**

#### **Overview and Organization of Results**

This chapter outlines the presentation of results and provides information on participants in order to contextualize the study findings. Following this chapter, my results are divided into three chapters to provide a detailed description of the findings. The first results chapter (Chapter 4) discusses the participants' perspectives on cannabis legalization in general, including perceived benefits and negatives, and students' perceptions of cannabis in relation to other substances such as alcohol, cigarettes, cocaine, and ecstasy. The second results chapter (Chapter 5) provides the results of students' perspectives concerning student current cannabis use, how cannabis legalization in Canada may impact students' patterns of use, and if cannabis will become a "gateway drug." This chapter also explains the perceived impact on academics, on relationships, and on both mental and physical health. The third results chapter (Chapter 6) focuses on the impact that cannabis legalization may have on the university as a whole; more specifically, on students' perspectives as to how cannabis should be dealt with on campus in relation to implementing rules and promoting cannabis education.

These chapters allow an in depth exploration of the many themes that arose from this study data, moving from more general societal impacts (Chapter 4), to more direct student impacts (Chapter 5), to how universities can deal with cannabis legalization in terms of policies and rules (Chapter 6).

I have included the following table to aid in the understanding of my results presentation:

Table 3.1

*Thematic Organization of Results Chapters*

<p><b>Chapter 4: Legalization of Cannabis in Canada</b></p> <p>Theme 1: Perceptions of Change in Cannabis Law</p> <p>Theme 2: Perceived Benefits of Cannabis Legalization</p> <p>Theme 3: Perceived Negatives of Cannabis Legalization</p> <p>Theme 4: Students' Perceptions of Cannabis in Relation to Other Substances</p> <p><b>Chapter 5: Perspectives of how Cannabis Legalization May Impact Students</b></p> <p>Theme 1: Perceptions of Students' Current Cannabis Use</p> <p>Theme 2: Patterns of Cannabis Use When Legalized</p> <p>Theme 3: Will Cannabis be a "Gateway Drug" for Students?</p> <p>Theme 4: Perceived Impact on Academics</p> <p>Theme 5: Perceived Impact on Relationships</p> <p>Theme 6: Perceived Impact on Mental Health</p> <p>Theme 7: Perceived Impact on Physical Health</p> <p><b>Chapter 6: Perspectives on How Universities Should Deal with Cannabis Legalization</b></p> <p>Theme 1: Perceived Impact of Cannabis Legalization in Universities</p> <p>Theme 2: Implementing Rules on Campus</p> <p>Theme 3: Promoting Cannabis Education</p>
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It is important to note that this table does not include the subthemes contained

within each theme.

### **Participant Information**

It is important, before reading the results chapters, to provide some information about the students that participated in this research study. This section will provide information about the students' demographics as well as other relevant data to further understand the research results. However, due to ensuring the confidentiality of each participant, I only included information that would not reveal the identities of each participant.

In total, eight participants were interviewed in my research study. All participants were currently undergraduate students attending Memorial University of Newfoundland during the Winter Semester of 2018. There was a range of participants in their first,

second, third and fourth years, with participants ranging in age from 18-27 years, with one at age 36. These participants had different identified university Majors, including Political Science, Computer Science, Nursing, Law, Psychology, Biochemistry Nutrition, History, and lastly Pure Mathematics/Pure Science (Joint Major). Five participants were male, and three participants were female, and I randomly chose pseudonyms for each participant: Lesley, David, Ryan, Jennifer, Andrew, Sarah, Corey, and Danny. This study represents eight students' perceptions of cannabis legalization in Canada.

## Chapter 4: Results – Legalization of Cannabis in Canada

This chapter presents the results corresponding to the title, *Legalization of Cannabis in Canada*. This chapter sets the stage for the remainder of the results, providing general information about cannabis legalization, and containing four themes (See Table 4.1). The first theme, *Perceptions of Change in Cannabis Law*, discusses participants' views regarding the upcoming changes to cannabis law. This theme contains two corresponding subthemes.

The second theme in this category, *Perceived Benefits of Cannabis Legalization*, contains five subthemes, each explaining the perceived benefits that will follow legalization. Participants discussed the benefits of cannabis legalization for a broad range of reasons that will be elaborated upon further in this theme.

The third theme in this category, *Perceived Negatives of Cannabis Legalization*, contains four subthemes. This section discusses students' perceptions of the negatives of cannabis legalization that includes one of the significant concerns regarding cannabis policy reform—whether or not it will increase cannabis use.

The fourth theme, *Students' Perceptions of Cannabis in Relation to Other Substances*, provides information on how students perceive cannabis in relation to other substances, specifically in regard to tobacco, alcohol, and other illegal substances such as cocaine and ecstasy.

To clarify, the following table highlights the current position in the analysis:

Table 4.1

*Thematic Organization of Chapter 4*

<b>Chapter 4: Legalization of Cannabis in Canada</b> Theme 1: Perceptions of Change in Cannabis Law Theme 2: Perceived Benefits of Cannabis Legalization Theme 3: Perceived Negatives of Cannabis Legalization Theme 4: Students' Perceptions of Cannabis in Relation to Other Substances
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**Theme 1: Perceptions of Change in Cannabis Law**

This first theme depicts participants' perceptions of cannabis legalization, whether in agreement with or apprehension of, the forthcoming changes in cannabis law.

Participants spoke explicitly regarding their views and discussed in detail their perceptions of cannabis legalization. The first subtheme in this section provides participant information that is in agreement with cannabis legalization, while the second subtheme provides information on their apprehensions.

**In agreement with cannabis legalization.** With regards to the legalization of cannabis in Canada, the majority of the participants were in agreement, favouring relaxation of the laws and preferring to see cannabis legalized. Some participants explained that the current laws of cannabis prohibition are inadequate, such as Ryan, a twenty-six-year-old male. He stated, "I don't feel like it's adequate. I feel like it's costing more people time and money than it needs to be." Corey, a twenty-seven-year-old male, also indicated that the current cannabis laws "should go away. I think they are too strict." When asked if he could further explain this, he simply affirmed, "Too strict in a sense that cannabis is illegal and it shouldn't be." Another participant, Danny, a thirty-six-year-old male, was also direct with regards to being in agreement with cannabis legalization,

stating, “well if it doesn’t hurt anyone I don’t see why they wouldn’t change them.”

Lastly, Lesley, a twenty-one-year-old female, noted that it would be “cool to go to, say, the store or wherever they end up putting it, and just be able to buy a gram of weed. Like just say you are having a party or something I don’t think it’s so bad”.

Furthermore, participants discussed the importance of cannabis regulation, including Sarah a nineteen-year-old female. She expressed, “I think it is a good thing that it is going to be regulated, well because people get into dangerous things all the time” and because of this, it could potentially cease “something bad from happening.” Corey also explained that “legalization, if done right, won’t pose any serious problems, but that’s only if regulation is enforced.” Sarah further highlighted the importance of cannabis regulations, specifically with regards to lessening judgement. She explained:

They can regulate it and have a place to talk and you don’t feel like you are being judged anymore. Some people smoke it and feel judged because it’s not something that people like. But at least when it becomes legal you know where you can do it and you know how much you are allowed to have and the police will have more rules regarding it.

**Apprehensive of cannabis legalization.** Some participants, including those who agreed with cannabis legalization, relayed some apprehension. This included Corey who was concerned with the possible “lack of oversight of legalized products.” He further explained that “if it isn’t enforced, then growers will cut corners to sell a cheaper product to make more money and if they’re cutting corners then that might result in a tainted product that then harms people.”

As mentioned above, Lesley discussed cannabis legalization as “kind of cool” but later noted that the “negatives outweigh the positives.” She discussed that if Canadians need cannabis, they can receive it for medicinal purposes. Similarly, a twenty-year-old female, Jennifer, explained that she does not feel cannabis should be legalized. She expressed that cannabis should only be “used for medicinal purposes” and those who use cannabis recreationally should “have some sort of consequences.” She elaborated:

Unfortunately, I see it benefitting Canada in just a popularity perspective so like, oh, it's 2018 you should be more accepting and that's why we are going to legalize marijuana. So, I feel like it would make Canada look more popular because I guess they see it as a cool thing to do, like you are appealing to the younger generation, but at the same time I honestly don't think it's a good idea. If they wanted to legalize it I'd say... you should only do it for the perspective of medicinal, so loosen the restrictions on that but tighten on recreational.

Although there were certain apprehensions, Corey discussed the notion of trusting the Canadian government to implement the appropriate cannabis laws. Corey stated, “I trust that the current government will talk to people and do the right thing. Sometimes the government do make sensible laws sometimes they don't.”

## **Theme 2: Perceived Benefits of Cannabis Legalization**

This theme lists the perceived benefits that could possibly arise with cannabis legalization in Canada. This includes the Canadian government receiving profit from cannabis being taxed; implementing age restrictions that will keep cannabis out of the hands of underage individuals; producing a safer product; lastly, the possibility of cannabis legalization decreasing crime rates.



**Profit/Tax revenue.** The taxation and economic opportunities to be gained from cannabis legalization was an important sub-theme that emerged during the interviews. A number of participants believed that legalization and regulation would provide economic growth. The main benefit participants articulated for the government receiving tax money included taking money out of the hands of criminal organizations and placing it back into the economy. While discussing the black market, Lesley explained, “they are the ones getting a profit off it right now and obviously, they are going to do whatever.” Similarly, Andrew, a nineteen-year-old male stated, “all of the money that is floating around the black market would be going to the white market so that would benefit the government.” Sarah also referred to the government receiving cannabis taxation as a benefit in this way:

it would go to the schools or something like that and if it’s going to the black market you don’t know what is being done with it. It could be going to someone buying more and making more drugs, or using it for anything really. At least with the government, you have a general idea what they could spend it on.

Participants also indicated that the tax money received from cannabis sales could be put towards funding drug education initiatives, treatment centres, and after-school programming. Ryan compared the benefit of the government receiving tax revenue and compared it to Colorado’s experience in this way:

There is a lot of tax money, I mean look at Colorado, there is a lot, and they could actually put a lot of money into drug education and you know addiction treatment...engage in extracurricular activities, more after-school programs and stuff like that.

**Safer product.** Safety was another perceived benefit of cannabis legalization to emerge from the interviews. For some participants, the legalization of cannabis is vital because government regulation would ensure a safe product that is of high quality. This will allow cannabis users to be more knowledgeable about the product they are purchasing and consuming. For example, Corey explained a situation in which cannabis was laced with another substance, commenting that these “risks” would decrease if cannabis was legalized. He stated:

Well, I imagine the people who do smoke would probably be smoking a safer product. I mean I’ve heard a few years ago...a strain of marijuana got shipped into the province from the mainland that had been laced with silicon to weigh it down...so people would pay more for it per gram...so people were essentially smoking plastic. I imagine if marijuana was legalized and then regulated, people wouldn’t be taking risks.

Participants emphasized the benefit of receiving cannabis from a reputable source that would be free from harmful chemicals and the possibility of being laced with other substances. With regards to this, Danny expressed, “They will have the pot-making companies selling stock, so they will probably have high-quality stuff there.” Ryan also indicated that, “it will make people not have to go to a drug dealer or stranger to go and buy it, so I think it is safer.” Lesley also referred to the benefit of receiving a safer product, explaining that it “definitely will be a benefit knowing what you are paying for, that it is safe, and that it does not have anything random or harmful in it.” Jennifer also explained this:

If reputable chains and stores like that are selling it... then instead of going behind some sketchy parking lot to get it, then the people who want to get it are going to get it from a safer source and I think that the chances of it being laced will be dropped.

Corey also further elaborated that cannabis legalization “removes a much riskier substance from the streets and it gives authorities an [easier] and effective way to control who gets marijuana and what type of marijuana people are using.”

**Age restriction.** A less dominant, but nevertheless significant subtheme to emerge was the benefit of implementing age restrictions when cannabis is legalized. Some participants believed that this would restrict underage individuals from purchasing cannabis. This included Andrew who stated that “there will be age restrictions on it, and you need an ID to purchase it so it would stop underage people from buying cannabis.” Jennifer added to this, explaining the benefit of age restrictions as because “by that time your brain is mature” and individuals “cannot think about a decision clearly if [they] are underage.” Interestingly, David explained that individuals “have that energy of going against or doing something that is not a convention basically,” and at the same time added that when cannabis is legal it will be “kind of be an encouragement for youngsters to do it.”

**Decrease in crime.** With regards to crime, many participants felt that having cannabis legalized would reduce crime and violence associated with the illegal trade of cannabis. Sarah maintained that “there won’t be as much crime then; well, won’t be as heavy of crime,” and her reasoning behind this was that “more people would move toward getting it legally because it would probably be cheaper.” Corey explained that if

cannabis was legalized for consumption, individuals “wouldn’t be taking risks... the risks that they take when they take an illegal product.” Ryan explained that the current status of cannabis is “a big part of the criminal underworld” and when cannabis is legalized it will “decrease crime and take pressure off of the legal system.” The advantages of individuals not coming into contact with drug dealers was also expressed by participants. With regards to this, Corey noted, “well I mean, for one, it gets people who use marijuana out of contact with drug dealers. It removes a source of revenue from dealers and other criminals...potentially violent criminals.”

By legalizing cannabis use and possession, participants suggested that violent drug crime could be curbed. Andrew explained that “since things are illegal people might use the way of killing to get what they want, and there are other consequences...I’ve seen this on TV.” He also explained that the “black market has a higher rate of crime rates” in comparison to the legal market where “it is legalized and you can find it anywhere.” Sarah also discussed the consequences of buying cannabis from the black market by providing this scenario:

Individuals in the black market, you don’t know what they are going to do to you. You could buy it off of them and all of a sudden they could kill you and take it back—they have the money, they have the weed, they’re good. With regulation, at least they know where they are going, they know exactly how much the price is, so no one is going to gun them down at the store for buying it.

Ryan also discussed how buying and using cannabis illegally could increase individuals’ chances of getting into trouble with the law. He indicated that “[going] to a drug dealer, I mean you risk criminal sanction, and you could cause a lot of issues for

your future and your career, and you can also just engage in some really sketchy people, so there's no point in doing that." He further explained that cannabis legalization would "take a lot of pressure off of the legal system and it's not worth going to jail for cannabis or anything like that."

### **Theme 3: Perceived Negatives of Cannabis Legalization**

This theme includes perceived negatives of participants in this study with respect to cannabis legalization. These negatives include the risk of individuals driving while under the influence of cannabis, and the possibility that cannabis use and crime rates might increase. Lastly, participants cited an increase in the smell of cannabis and in being exposed to this smell as another negative of cannabis legalization.

**Driving under the influence.** A significant subtheme to emerge regarded a concern with, and consequences of, individuals driving under the influence of cannabis. Many expressed that there could be increased vehicle accidents as a result of legalizing cannabis. This was indicated by Danny when referring to cannabis legalization. He explained that "it might cause more car accidents, could be like drinking and no one knows the limit yet. The first year there might be a bunch of car accidents because people might treat it like a cigarette and smoke it while they are driving." This concern was also brought forth by Lesley, who stated that, "by legalizing it, more people are going to be high driving. There is going to be more accidents involved, and I think that it is going to be really negative in that way." She then elaborated further that "It's bad enough being behind a drunk driver, and just watch now, there's going to be no hope at all, and obviously, there are going to be innocent people who are going to be affected by this because they are the ones who will be in the other car." Similarly, Jennifer posed the

same concerns, and questions commenting that, “People now are always saying don’t drink and drive, but what happens when people are high?” She emphasized that individuals use cannabis and drive now, but expressed concern that, “if it becomes legal in July, what if the rate of driving under the influence increases? All of a sudden it’s more accessible and, yeah, it’s probably coming from a safer source, so it’s probably not laced, but you still get high when on marijuana.”

Participants often referenced the need to impose rules and regulations to prevent individuals from driving while under the influence of cannabis. Jennifer believed that “anything that alters your brain when you’re operating a motor vehicle, or anything like that, should be treated the same way.” Another participant, Ryan, stressed the importance of imposing rules and regulations, stating, “I think they should impose regulations like you can’t drive unless you have had 4 hours in between something you smoked.” Further, Sarah concurred, “as long as they have rules set up and not just legalizing it and letting it be, actually having restrictions, like this is where you can buy it, and you cannot do it and then go driving... and there are fines and punishments if you go against the law.” Jennifer also questioned, “what if you hit another car, then how is the insurance thing? Well, oh all of a sudden cannabis is legalized so, oh, I thought that I could drive like this, so I think there is a gray area there.”

Participants also presented concern as to how cannabis use will be tested for operating a motor vehicle. As Ryan stated, “I think they need to find some other way of testing, like a breathalyzer but for pot. I know that’s probably obscure, but I’m sure they have something.” As a counter-argument to the idea of having a breathalyzer for cannabis, Corey said that:

Well, there are sobriety tests, so if someone is obviously driving impaired, then I don't think you need a breathalyzer to determine whether or not someone is driving impaired. There are other tests that you can perform on a person to determine whether or not if they are well enough to drive.

Sarah also posited a similar view regarding the signs and warnings of individuals who may be driving while high, stating “the police would know the signs and stuff like that or they would pull them over anyways because they would think they were drunk. I'm going to guess [that users] would have blurred vision as well. They would be driving like they were driving drunk.”

**Increase in use.** Another common subtheme in the category of perceived negatives of cannabis legalization is the possibility of an increase in cannabis use overall. David indicated that an increase in cannabis use would likely occur with legalization, and conjectured that individuals who “fear...doing it illegally, would now do cannabis.” He further explained that the illegal status of cannabis is the “main reason they are not doing it,” and when it becomes legal, “they would start doing it, so basically increasing the usage.” Within this context, other participants agreed, including Corey who mentioned that individuals “would be smoking more of it since it's easier to get their hands on.” Even more specifically, Lesley explained that individuals have a tendency to abuse all things, including substances. She indicated that “whatever you give people, they are abusing it. It's not possible for people to go out and have one or two and have a good time and [act] like nothing happened. Like, whatever they are given, they are going to abuse it.” She also expressed concern about an “increase in younger people smoking it as well... even teenagers now—they will get their parents to go and buy it for them, and I think it

will be the same way with the marijuana.”

**Increase in crime.** Interestingly, a couple of participants believed that the legalization of cannabis would increase crime rates, as Jennifer indicated:

I think that crime maybe would go up. Again, because people aren't thinking straight when they are high... what seems like a terrible idea when you are not high could be a great idea when you're high...you hear in the news there is an assault or a break-in, so how much more would there be now if they are not thinking straight? If there is such a high rate now with people doing marijuana and if it is more accessible, then just put two and two together.

Andrew had similar thoughts to Jennifer, explaining that using cannabis would promote “doing things which they are not supposed to.” He further expanded that “going around and hitting someone is not the best idea, but if you are high you are unsure of what you are going to do.”

**Increased smell.** The last perceived negative of cannabis legalization is the anticipated increase in the smell of cannabis in public places. Jennifer advised that she “personally hates the smell of it so just walking down the street you can smell it, and I find it disgusting. [It's] not really fair to the people around you who have to inhale it or have to have the smell around—it's really disgusting.” Sarah also simply stated, “I remember smelling it one time before, and I hated the smell.” Lesley relayed that, “it has a really bad smell to it, something I really don't like about it.” She further expressed her concern about the possibility of the smell being more prominent on the university campus with legalization, noting that “the school would smell like it too because it's very distinct. Like I remember in high school I had a locker by someone... I remember hating going to



my locker, like—I would rush out.”

Jennifer talked about the importance of rules being enforced because “it’s not fair to other people around you just because you decide to do it, the smell just gets off you and it just stinks.” Also, she added, “You don’t know the effect that it has on you; just say a pregnant mother on campus, for example, you don’t know [the effect] the smell will have on her or the baby, so you got to think about other people.” Jennifer continued discussing the impact that the smell of cannabis could have on other individuals. She explained that cannabis “has a pretty potent smell so, even if you are next to someone for so long, I think that you can inadvertently get high, so it all depends on how potent it was.”

#### **Theme 4: Students’ Perceptions of Cannabis in Relation to Other Substances**

This theme analyzes participants’ perceptions of cannabis compared to other substances, legal and illegal. This includes comparing cannabis to tobacco and alcohol and illicit drugs such as cocaine and ecstasy.

**Cannabis versus tobacco.** Participants’ opinions varied considerably when comparing cannabis to tobacco. Andrew rationalized that tobacco was considered to be less impactful, noting “it [has] a slower impact because you don’t see people getting high on the spot.” In comparison to this, Lesley explained that cannabis is safer and less harmful than tobacco, communicating that she “would rather smoke weed, or, I think that smoking weed is better than smoking tobacco.” She maintained that cannabis is “better,” further claiming that “tobacco is really bad like they advertise it and you see the effects, and like, you can see that everyone is dying of lung cancer, but you don’t really see that with cannabis.” Ryan indicated that, when comparing cannabis to tobacco, it “depends on

how you are using cannabis,” noting that it differs if one is “vaporizing it or combusting it.” He then observed that if individuals are “combusting it like a cigarette...it would be comparable to tobacco.”

**Cannabis versus alcohol.** Perceptions on this topic also varied, with some participants arguing that cannabis is safer than alcohol, arguing that cannabis affects mental stability more than does alcohol, yet others contending that it depends on the extent to which these substances are used. Ryan claimed that cannabis is “not harmful” and thought of it as “better than alcohol.” He explained that “statistics and studies have proven that it is relatively not harmful...and actually does have medicinal benefits.” Lesley had similar views, explaining that cannabis is “more around the range of alcohol.”

David argued that cannabis is more problematic because it affects ones’ mental stability and impairs users. He elaborated, “I believe cannabis use...can change the mood of the person, change how they will react normally, but using cigarettes or alcohol you can still maintain your mental stability... but using cannabis you could do something illegal and still not know about it.” David elaborated that he had read on the internet that “cannabis has a direct impact on your brain and alcohol has a slower effect than cannabis.” He concluded, “[this] is why I believe that cannabis is worse.” Jennifer also agreed that cannabis is worse and “less tolerable” simply because “alcohol is legal.”

In comparison to both perspectives mentioned above, Corey specified that when comparing cannabis to alcohol, it “depends on what people’s physical limits are. If they are using it just recreationally, once every now and then, or they are using it to cope with problems.’ Corey further elaborated:

You do have your people who smoke every now and then, but the majority of the users are daily users, people who smoke every day for whatever reasons. So, contrast that with someone who drinks every day to de-stress or whatever...even if it is one or two beers a day that might be a problem...if it is at the amount comparable to however much daily users of marijuana use then I think that it will still be a problem even if it is alcohol or another substance.

**Cannabis compared to other drugs.** When comparing cannabis to other drugs such as cocaine and ecstasy, participants uniformly deemed cannabis to be much safer, thus incomparable to other drugs. For example, Lesley specified, “I think it is better than cocaine or ecstasy” and Ryan effortlessly stated, “Oh, it’s definitely not even close.” Jennifer also discussed this notion, commenting that cannabis is “not lethal, so people know that if they are doing it, then they know that it’s not going to kill them and it’s an easy way to get high.” Corey also stated, “I don’t think it should be illegal like heroin or cocaine,” and then further explained that cannabis “doesn’t mess you up as much as cocaine or heroin.” Interestingly, Danny specified that cannabis is “not addictive” and explained that cannabis “is something that they can do on the weekend and not worry about all of a sudden being broke because they have spent all of their money on it.”

When comparing cannabis to other drugs, some participants mentioned the medicinal benefits of cannabis. Andrew rationalized that other drugs are “worse than cannabis” and explained the medicinal benefits associated with cannabis in this way:

I believe all of the illegal drugs are harmful to your health, and there is a reason why they are illegal, but especially cannabis it also has a medical perspective

which makes it a little bit less dangerous... if it is used for medicine there has to be some benefit.

Jennifer also discussed the medicinal benefits associated with cannabis, explaining that cannabis is “slightly more tolerable than the other illegal drugs just for the sake that there are medicinal benefits, you don’t hear medicinal benefits from cocaine or ecstasy.”

### **Concluding Thoughts**

This chapter covered the first results category generated from my research data. This chapter, *Legalization of Cannabis in Canada*, contained four themes. The first theme provided the results corresponding to students’ perceptions of change in cannabis law in general terms with regards to agreeing with these changes and their perceived apprehensions towards cannabis legalization.

The second theme looked at the participants’ perceived benefits of cannabis legalization. This included the Canadian government receiving revenue from cannabis taxation; making available an overall safer product; implementing age restrictions so that cannabis will be kept out of the hands of underage individuals; and lastly, allowing for a potential decrease in crime rates.

The third theme discussed participants’ perceived negatives of cannabis legalization. This included the possible increase in individuals driving while under the influence of cannabis; the possibility that cannabis legalization may increase cannabis use among users and non-users themselves; and the possibility of an increase in crime rates. Lastly, participants maintained that an increase in cannabis consumption would result in an increase in the smell of cannabis, and this was also perceived to be a negative feature of cannabis legalization.

The last theme in this category presented students' perceptions of cannabis in relation to other substances such as tobacco, alcohol and other illegal drugs such as cocaine and ecstasy. These comparisons highlighted the fact that participants had varied views of cannabis when compared to tobacco and alcohol, but all viewed cannabis as safer than drugs such as cocaine and ecstasy.

## **Chapter 5: Results –Perspectives of how Cannabis Legalization May Impact Students.**

This chapter presents the results corresponding to the category of *Perspectives of how Cannabis Legalization May Impact Students* and contains seven subthemes. The first theme is titled, *Perceptions of Students Current Cannabis Use*, and discusses participants' perceptions of why cannabis is the most commonly used illegal drug among university students in Canada. This theme contains two corresponding subthemes.

The second theme is called, *Patterns of Cannabis Use when Legalized*, and contains three subthemes. This section discusses students' perceptions regarding how they perceive that legalization will affect students' use of cannabis.

The third theme in this category is titled, *Will Cannabis become a “Gateway Drug” for Students?* This section discusses the hypothesis that cannabis use leads to the use of other harder drugs, and participants' perceptions concerning this. This theme contains two subthemes.

The fourth theme is, *Perceived Impact on Academics*, and analyzes participants' perspectives on how cannabis legalization may influence university students' academics while attending university. This theme includes three subthemes.

The fifth theme is called, *Perceived Impact on Relationships*. This section involves two subthemes discussing how cannabis use can ultimately impact students' relationships with other individuals.

The sixth and seventh themes in this chapter discuss participants' perceived perceptions on the impact that cannabis legalization may have on health. The sixth theme is titled, *Perceived Impact on Mental Health*, and involves two subthemes. The seventh

theme is, *Perceived Impact on Physical Health* and includes three corresponding subthemes.

The following table highlights the current position in the analysis:

Table 5.1

*Thematic Organization of Chapter 5*

<p><b>Chapter 5: Perspectives of how Cannabis Legalization May Impact Students</b></p> <p>Theme 1: Perceptions of Students' Current Cannabis Use</p> <p>Theme 2: Patterns of Cannabis Use When Legalized</p> <p>Theme 3: Will Cannabis become a "Gateway Drug" for Students?</p> <p>Theme 4: Perceived Impact on Academics</p> <p>Theme 5: Perceived Impact on Relationships</p> <p>Theme 6: Perceived Impact on Mental Health</p> <p>Theme 7: Perceived Impact on Physical Health</p>
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**Theme 1: Perceptions of Students' Current Cannabis Use**

The first theme in this chapter discusses participants' perceptions of students' current cannabis use, mainly the reasons why they think cannabis is such a commonly used illegal drug among university students in Canada. In the emergent subthemes, participants explained that cannabis is a stress reliever for students who are dealing with copious amounts of stress while attending university. A second reason given for cannabis use being so commonly used among university students is that cannabis is so easily accessible.

**Relief from stress.** When participants were asked why they think cannabis is the most commonly used illegal drug among university students in Canada, the majority responded that it is because it decreases stress. It was explained that, with the high stress of attending university, using cannabis can be an outlet to relieve this stress. Ryan, who indicated having a license for medical cannabis, noted from personal experience that

using cannabis “definitely relieves stress and it can actually help you concentrate and helps cope with whatever is going on.” He further explained that students use cannabis because “university is stressful and a lot of people are away for the first time, and it’s understandable.” Corey also indicated that “for people who are pulling 8-10 hours a day studying plus pulling down a job to keep them in school or to keep them in rent, a joint would probably calm them down.” Sarah also acknowledged the stress that university students deal with in stating that “You get anxious and stressed with all of the essays, tests, exams and maybe smoking would probably calm their nerves, maybe mellow you out.” She further explained that cannabis use could help students with their academics, especially those who get stressed, explaining:

Some people get really stressed about certain things like, I don’t take cannabis or anything, but when I do exams, I get super stressed. I actually did a mock exam the other day, and my partner told me that I had a white face and that it looked like I was going to faint. So maybe taking it and mellowing out or at least calming their nerves could at least give them a chance, and it might help them relax more and do better on their test because they are not freaking out.

Although David explained that the “main purpose” for using cannabis among university students is “relief from stress,” he advised that this relief is only temporary and does not change the number of responsibilities required by students. He described this circumstance:

Let’s say they have a lot of deadlines, which is a form of stress... using cannabis I guess it would change their mood, and changing their mood might make them



forget about the deadline and to forget about the stress...it might also make them forget about the deadlines and not remember at all. It's kind of two-sided.

**Easily accessible.** A few participants felt that cannabis was used frequently because it was easily accessible. Jennifer explained that "it's so easy to get access to it." Similarly, Cory when discussing the high rate of cannabis use among students, matter-of-factly stated that cannabis is "easy to get."

## **Theme 2: Patterns of Cannabis Use when Legalized**

This second theme discusses students' perceptions regarding how they perceive that legalization will affect students' use of cannabis. This was expressed in three subthemes wherein cannabis use was seen to either increase with legalization, decrease, or its use to vary depending on the person.

**Increased use.** With regards to the impact that cannabis legalization may have on students' use, the vast majority of participants felt that legalizing cannabis in Canada would have a negative effect and will ultimately increase students' use. For example, Jennifer explained how she felt that "the rate will just increase more." Identically, Ryan also advised that the rate of cannabis use "will increase." With regards to this, Lesley not only felt like cannabis use would increase, but would also see "a lot of university students coming to school high" after legalization.

Many felt like the increase in students' usage of cannabis would be mainly due to having easier access to the drug much as Andrew explained, "it might increase because it just increases one of the options of getting it." Jennifer elaborated on this notion and explained that cannabis legalization is "probably going to increase the rate of university students or just anyone doing it because, if it's more easily accessible then people would

be, oh well, I'm not going to be criminalized for it anymore so why not." Likewise, Sarah felt that cannabis usage "would increase because they know its legal now so they won't get in trouble for buying it; they can't kick me out of university for using it, so there is no harm in me getting it."

**Decreased use.** One participant identified how cannabis legalization could decrease cannabis use among students, highlighting the comparison to other countries. For example, Andrew stated:

The city that I am from, alcohol is illegal, and it turns out that that city has the most alcohol consumption in the country. Whereas places where it is legalized the consumption is actually normal, so considering if it is legalized, it might even decrease the use of cannabis.

Andrew expanded on this concept by expressing that "when things are illegal people use it more compared to when they are legal. When it becomes legalized, there is a possibility that the usage will decrease."

**Depends on the person.** One argument made by some participants is that the pattern of cannabis use among university students depends mainly on the person. Factors included if individuals were regular cannabis users, the amount of self-control one manifested, and just the newness of legalization. Participants suggested that cannabis use depends on whether or not they were regular users of cannabis before legalization was enacted. Corey shared:

I remember reading or hearing studies somewhere that even after legalization the majority of users are regular smokers, like before and after legalization. In other

places, the large majority of smokers of marijuana are still those who smoke it multiple times a day.

Similar to this, Andrew explained that due to cannabis being legal it will be “a lot more in demand but as time goes on it will go back to normal because those who are used to using it will use it, and others may not use it anymore.” He then expanded on this, explaining that individuals “are going to use it for recreational purposes even when it is illegal, so if they are going to get it there will be legal means of getting it.” Lastly, Danny expressed the importance of self-control with regards to cannabis use, stating, “it depends on how much self-control they have. If they have very little self-control, they are going to fail and drop out because they are smoking pot all the time.”

### **Theme 3: Will Cannabis become a “Gateway Drug” for Students?**

All but one participant did not believe that cannabis use would become a “gateway drug” leading to the use of “harder,” more “dangerous” drugs. Interestingly, some participants also indicated that it depends on the person. These three subthemes will be explained further below.

**Does not agree that cannabis is a “gateway drug”.** Although all participants indicated that they had heard of cannabis being considered a gateway drug, as just mentioned, seven out of ten participants did not believe this. This included Ryan who explained that seeing cannabis as a gateway drug can be “a misconception”; he did not think of cannabis as “a gateway drug by any means.” Andrew also did not see a “direct connection” and expressed that “even if it is legalized the situation has not changed much for people to change to a different drug if they are already using this one.” Notably, Corey concluded that the likelihood of students moving to other drugs would decrease with

legalization due to not associating with drug dealers who sell other drugs. He explained this notion in this way:

I think it will decrease the likelihood that people would go from using marijuana to using harder drugs since the link between people buying marijuana and then moving on to harder drugs would be [removed] since they won't be dealing as much with people who deal with harder drugs.

It should be noted that Danny suggested that there are other substances other than cannabis that are more problematic in terms of a gateway drug, expressing the opinion that "I think cocaine is more of a gateway drug."

**Agrees that cannabis is a "gateway drug."** One participant, Sarah, agreed with this "gateway hypothesis." She expressed that "it's a very big possibility because a lot of people would probably want to continue with marijuana but if they feel it's not giving them the biggest thing then they might take something else with it to get a bigger high."

**Depends on the person.** Participants believed that it depends on the person. Although Andrew mentioned above that he did not see a direct connection with regards to cannabis as a "gateway drug," he explained afterwards that "it really depends upon the student." He added, "if I am already having a lot of cannabis and I am fed up with it, only then would I go to another drug." Also, when discussing cannabis as a "gateway drug," Lesley described the following:

Like anything, it will for some but not for others...like marijuana, if you [use] it, it will be like smoking tobacco, oh well that's not as bad, then you'll start smoking marijuana and then you get sick of that effect so then you might want something better...So, yeah, I think it will because I think that the way people are they will

always want better; that's their mentality, so I think why wouldn't that transfer over to that too.

Jennifer also believed that with regards to cannabis as a “gateway drug” it depends on the person, explaining:

Well, I guess it depends on the person you are and maybe if you are peer pressured into it... you end up hating it and then you would probably stop at that but if you are the kind of person that likes that adrenaline rush and likes it, you would say, well this is great, now I want something more. It depends on personal preference and your predisposition.

#### **Theme 4: Perceived Impact on Academics**

This theme analyzes participants' perspectives on how cannabis legalization may influence university students' academics while attending university. Results varied, with subthemes in which some participants took the stance that it would impact academics negatively, others explained that it would have little impact on academics, while lastly, some participants mentioned that it depends on the student.

**Impact academics negatively.** Legalization of cannabis was viewed by some participants as being harmful in tending to lower students' academic standing. As Danny stated, “it sounds like it turns people into vegetables.” Lesley also said that cannabis “can affect your sleep, which obviously has a big impact on your grades.” Andrew added:

since people would be using more drugs for whatever reason, maybe from encouragement from legalization, maybe misinterpretation, they are going to be decreasing their academic standing. If they did not use it previously or if they are abusing it more than they used to, it will impact their academic standing.

Jennifer also agreed and felt that if students have “easy access to cannabis” then they are “probably taking away time from school, maybe they are skipping school” or “they are probably not as focused on their studies, or if they are going to parties all the time, then guess what, they are still not studying as much.” Andrew, like Jennifer, indicated the importance to “consider the increase of usage of cannabis, where their academic standards might decrease” possibly due to not concentrating on their studies, therefore having an “impact on academics in a negative way.” Jennifer further elaborated on this topic by referring to her own learning experience in a university course, concluding that “if you are a frequent user of cannabis then your IQ or your intelligence level goes down a little bit so I don’t think it would have a very positive effect on academics.” Ryan also felt that cannabis use can affect academics, “I mean if you smoke something before you go to class I’m sure you will have bad short term memory... so it can affect it, I guess, so you just have to use it responsibility.”

**Little impact.** Corey justified how cannabis legalization will have little impact on academics, per se, because “people who are going to be smoking are not going to be doing well either way” and are going to “deal with their stress through other substances such as alcohol, tobacco, or another illegal substance such as a synthetic drug.” Corey explained this further in this way:

Like I said it probably isn’t going to affect it too much one way or another since students who are going to smoke and need a chemical remedy, like a chemical substance to deal with their stress from studying are probably going to seek out one anyway, regardless if its marijuana, legal or illegal. If they cannot access

marijuana then they will probably seek out alcohol which many students do anyway, or tobacco, or another substance legal or illegal.

**Depends on the student.** Many participants explained that the effect that the legalization of cannabis would have on academics depends on the student with respect to potential underlying mental health vulnerabilities. Ryan advised that cannabis “can cause psychosis...in people who have underlying conditions, so it could impact academics in that way.” Sarah also captured this subtheme well in stating that cannabis use:

Could help...them calm down and de-stress and just focus, but if they are doing it all the time and not taking it [responsibly] and just when they need it, then their [academic effort] probably would decrease; because they are not focused they can't study, they can't do anything. So, they wouldn't be prepared for a test or exam or do their essay because they would be too high or strung out to actually do anything.

Other participants explained that it depends on other factors such as one's personality, their ability to focus, finances, and lastly, if they are easily peer-pressured. Andrew maintained that it depends on their personality, “So if the person is into drugs and will use drugs then, yes, it will affect his or her academic standing.” Ryan emphasized that it depends on the students' ability to focus when using cannabis. He explained that when using cannabis, “some people can zone into their work and concentrate for a long period of time and memorize everything, which I do, and some people are the opposite way and cannot focus.” In particular, Danny contended that it depends on the students' learning habits and “if the guy is already a poor student [academically] then it is really going to affect him, but if he is a good student academically then it might not affect him as much

because he will be able to study.” Lastly, Jennifer advised that it would affect each person differently and if they are easily peer-pressured. She stated, “I think it would just affect the person doing it...if they have friends around them who are easily peer pressured...it might spiral out like that.” In addition to this, Jennifer explained that it would only affect academics on an individual basis:

if you want to do weed all of the time or your spending/investing so much energy in trying to get it and smoke it... then you are probably not focusing much on your academics. So, I mean I think that on an individual basis...your grades would drop or you would not be putting in the same amount of effort on academics

### **Theme 5: Perceived Impact on Relationships**

Three participants had difficulty with this theme, with Sarah and Danny advising that they had “never actually thought about” how cannabis impacts relationships. Corey also had difficulty with this topic and asked if this could be readdressed at the end of the interview. The first subtheme in this section portrays students’ beliefs that cannabis use harms relationships. The second subtheme emphasized that the impact of cannabis use on relationships depends on certain factors. These factors include the amount and frequency of cannabis used, students’ views, and whether or not cannabis is used medicinally or recreationally.

**Harms relationships.** Lesley explained that cannabis use negatively impacts relationships because “people are obviously going to abuse it because they do it with everything else, so like alcoholism which separates people, I think that marijuana will be another thing that separates people.” Sarah provided an example of an individual who “would never be able to get in a relationship with someone who does drugs; she couldn’t



stand the smell and all that sort of stuff, so it can stop relationships before they even happen.” David also informed that the legalization of cannabis would “divide friends” and “divide relationships.” He further explained that within his group of friends the “friends who do cigarettes we ask them if they can do it outside when we are not in the premises.” He indicated that this divides his friend group and similarly, this will “divide the people who are doing cannabis.” David further elaborated:

Usage of cannabis would affect the Muslim religion since it’s prohibited to use any kind of drug...basically, it would separate Muslims from anyone who is doing cannabis... even if you do have that friend, he would separate you when you are doing cannabis. I’m not a Muslim, but I do not take any kind of drug or alcohol or cigarettes. So basically, it would separate myself from anyone who is doing cannabis. So basically, separating me from other friends.

Lastly, Lesley specifically noted the impact cannabis use could have on teacher-student relationships, stating “I don’t think many teachers would like going and chatting [with] them when they are high.” Corey expressed that, initially, it may hurt relationships but “only until social attitudes have time to shift toward the shift in regulation, and smoking a joint once a week is seen no differently than having a couple of beers on the weekend.”

**Depends on certain factors.** Many participants took the position that the effect of cannabis on relationships would depend on the amount and frequency of cannabis used, on individual viewpoints, and if cannabis is used medicinally versus recreationally.

Two participants expressed the view that the effect that cannabis has on relationships depends on the amount and frequency of cannabis used. As Danny explained: “If it’s a weekend thing it might not affect relationships, but if their kid gets

obsessive of smoking pot, it might affect relationships.” Corey had a similar view, explaining that “if they are just the type of person who tries it every now and then, then it shouldn’t affect students’ relationships.”

Sarah expressed that the impact cannabis use will have on relationships may depend on the individual and on their views because “some people would probably be okay with you doing drugs as long as it is helping you, but others may not be able to stand it and say they have to choose me or the drugs.” She further explained that this could potentially “break up relationships because there’s a big chance that they are not going to choose you.” Ryan also expressed this view, explaining that “it can work either way... it can cause people to withdraw, or I think that it can cause people to be more open. So, it depends on the personality of the person.” Ryan, who has a medical marijuana license explained that it makes him “very selective” in his relationships and in realizing that he is “seeing things from a different perspective.” His cannabis use causes him to “drift from people and maybe go with people who are more understanding.”

With regards to using cannabis for medicinal purposes, Andrew explained that if “the person is getting proper medicine with cannabis, then it’s going to improve relationships over time because the person would be much more stabilized. Whereas if it is used for recreational purposes, then it might affect it in a negative way.” Likewise, Sarah noted that it also depends on “the reason you are taking it.” She elaborated that if students are using cannabis “for medical reasons and as long as they know why you are taking it, then your friendship will probably survive.” In comparison, Sarah indicated that if students are using cannabis to “get higher, higher, and higher, then I would say it would

break friendships pretty fast because they are no longer hanging out with you... all they want to do is smoke weed.”

### **Theme 6: Perceived Impact on Mental Health**

This theme discusses the participants’ perceived impact of cannabis use on mental health, with some participants mentioning that cannabis use will have a negative impact on mental health, and others indicating that it could have a positive effect on students’ mental health. These subthemes are explored in this section.

**Negative impact on mental health.** When the topic of mental health came up, many participants assumed, but were unsure, if cannabis use has an impact on mental health. In fact, Andrew explained that he did “not know the exact effects of cannabis” maintaining that “since it is shown that it is harmful in many records, it might affect mental health as well.” Jennifer also stated, “I guess, from what I know so far I think it will have a negative impact on mental health,” while David also explained that “considering the direct impacts of the drug... it might affect their mental health.”

The increase in the possibility of showing schizophrenic symptoms through cannabis use was a reoccurring subject, with Ryan emphasizing that “it depends on how you use it,” further adding that “if they use more or [are] not responsible with it, it can cause psychosis...in people who have underlying conditions so it could impact in that way.” This was also mentioned by Jennifer, who informed that she had learned from a psychology course that cannabis use “can increase the risk of someone getting schizophrenia and psychosis.” She further explained that “if people are doing it all over the place...people who are exposed to it might have consequences of getting a disease so, it’s not like second-hand smoke like tobacco, but similar.” Lesley also remembered

previously reading that cannabis use can “increase your chances of getting schizophrenia, or if you are predisposed, that it could increase your chance.... Taking and using cannabis, then, can have a very negative effect on mental health.” Similarity, Ryan explained that cannabis could be “dangerous for mental health, especially if someone has some underlying issues; I mean people should be aware of the potential harms of it because it can create psychosis or things like that if people don’t know.”

**Positive impact on mental health.** Two participants, Sarah and Corey, explained that cannabis use could have a positive effect on mental health. Sarah revealed that cannabis use could be beneficial for “anxiety and stuff like that because you can take it and it could possibly calm you down.” She expanded on this notion, pointing out that cannabis could “make them feel better and just give them an escape.” Although, for different reasons, Corey also felt that legalization of cannabis would have a positive influence on mental health if individuals find it “easier to seek out medical help or other help.” He elaborated:

People who use will probably feel a bit more comfortable seeking out help...as they no longer have to admit they are using an illegal substance and dealing with people who deal drugs. I imagine a lot of people who want to quit and seek resources may not think that that would be a great idea because, if they start seeking out help from an authority and then their dealer gets wind of that and their dealer may not take that kindly, and they may face some repercussions for that.

To conclude this subtheme, it is important to note that although Sarah advised that cannabis use could have a positive impact on mental health, she additionally added that it potentially depends on what type of mental illness one may have. She explained that

cannabis use would not have a positive impact for “all types of mental health, just for certain ones... for some people and their issues, it could probably [worsen] than actually fixing them, so I guess it depends on what you have.”

### **Theme 7: Perceived Impact on Physical Health**

The last theme in this chapter discusses subthemes emerging from participants’ perceptions of the impact that cannabis use can have on physical health. Some participants explained that it could have a positive effect, others emphasized that it could have a negative effect; and lastly, there were those who maintained that it depends on the person.

**Positive impact on physical health.** Jennifer was straightforward in explaining the benefits that medicinal cannabis can provide for individuals who are sick. She elaborated, saying:

It can help with cancer and anorexia and all of these different diseases, which is great. So maybe when it is legalized it would be a lot easier...for people who generally need it for medicinal reasons to actually have access to it because it probably wasn’t the easiest to have access to it before having to have all of these chemotherapy drugs so, [from a] medicinal perspective, it’s great.

The medical benefits of cannabis on physical health was also illustrated by Andrew, indicating that cannabis use for medicinal purposes “would [positively] impact physical health because they would get treated.” Corey also pointed out that “if people are suffering pain and the cannabis helps them in a way that...they would otherwise require more strong and more harmful painkillers like OxyContin or whatever, if the alternative is cannabis, then I don’t see the problem.”

**Negative impact on physical health.** Participants identified many different reasons why cannabis use can negatively impact one's physical health. This included Danny who merely stated, "if they are lazy" it will impact physical health negatively "because they won't want to get up anymore." Andrew commented on the impact of the price of legalized cannabis because "if it is cheaper, then people might buy more of it and an increase may cause health effects." Meanwhile Sarah explained that cannabis use "could lead to a very bad effect on your body" insofar as cannabis use "could actually damage your brain and, instead of helping you, it is harming you." She also explained that it depends on the frequency of use, hence "if you use it a lot then your physical health could deteriorate." This was also discussed by Corey, explaining that with cannabis legalization, individuals are "probably going to be smoking more, which will place them at even greater risk."

The location of use was also a factor for Sarah, who explained that if you use cannabis in a certain location such as "when you are driving, that could be very dangerous and possibly get you killed." With regard to the impact of cannabis on physical health, while Jennifer had revealed some of the positives of cannabis use with regards to physical health, she also explained that cannabis has been:

Proven to cause other diseases, because you never know if it is pure cannabis or if it is laced with something. So, if it's laced with something then you are even more exposed to harms or physical consequences, and if people are doing it all over the place [then the] people who are exposed to them might have consequences of getting a disease.

In addition to this, Jennifer conjectured that cannabis might have many of the same toxic substances as tobacco. She explained that “if you look at tobacco, for example, there are so many carcinogens in the smoke and present in the tar in tobacco, so there must be carcinogens like that in marijuana itself and, depending on the potency of it, then that could cause problems.”

Unlike other arguments, Corey discussed the negatives that cannabis legalization would have on the health system itself, indicating that cannabis use would:

Probably place a larger burden on the provinces’ health systems because a lot of people smoke. So, whether you are smoking tobacco, or you’re smoking cannabis, you are still inhaling a burning substance into your lungs, so that puts you at a greater risk for lung cancer, unless taxes raised from marijuana sales go directly into the health system to offset it. But even then, I don’t know if the amount of revenue raised by marijuana sales would be able to offset the burden placed on the health system.

**Would not impact physical health.** Some participants considered that cannabis use would not impact physical health. As Ryan explained that, using cannabis, the “physical harms are not really there.” He then further explained that it really depends on how individuals are using it because, if they are “just vaporizing, it doesn’t have much effect,” but if they are “combusting it like a cigarette, it does have the potential to be cancerous.” Lastly, David indicated that he does “not really know the health impacts of cannabis.” but he still gave this statement:

I don’t think it can affect a lot unless the user of cannabis is doing something... not knowing he is doing something. So, basically what I am saying is if he or she is in

a situation where they could harm themselves, meaning he is walking while having cannabis... it could lead to an accident so that's the only possible way I think it would affect them physically.

### **Concluding Thoughts**

This chapter covered the results based on *Perspectives of how Cannabis Legalization May Impact Students*, and contained six themes. The first theme provided the results corresponding to perceptions of students' current cannabis use. This was in regards to why they felt that cannabis is the most commonly used illegal drug among university students in Canada. The subthemes that emerged from this question included, relief from stress and having easy access to.

The second theme looked at participants' views regarding anticipated patterns of cannabis use when legalized. Varied responses were obtained, including the possibility of an increase in students' cannabis use, or conversely, a decrease in students' cannabis use. Lastly, many participants explained that the impact of cannabis use when legalized would largely depend on the person.

The third theme discussed students' perceptions concerning cannabis as a "gateway drug." This included participants who did not agree with this hypothesis, with others agreeing that cannabis would become a "gateway drug," leading to harder and harsher drugs.

The fourth theme discussed the perceived impact that cannabis use may have on academics. This included three subthemes, the first encompassing participants' views that cannabis legalization would impact academics negatively; the second subtheme supporting the view indicating that it would have little impact on academics; the third



subtheme mentioned that it depends somewhat on each individual student.

The fifth theme presented participants' views on cannabis legalization and its effect on relationships. This involved two subthemes: that legalization would harm relationships, and whether harm would occur would depend on certain factors. These factors included the amount and frequency of cannabis used, participant views, and if cannabis is used medicinally versus recreationally.

The sixth and seventh themes discussed participants' perceptions of the impact that cannabis use can have on health, mental health and physical health, respectively. In Theme Six, some participants' felt it would have a negative impact, while others supported the viewpoint that it would impact mental health positively. Results for Theme Seven on physical health varied, with some participants identifying a positive impact, and others identifying a negative impact. Yet others maintained it would not impact physical health at all.

## **Chapter 6: Results –Perspectives on How Universities Should Deal with Cannabis Legalization**

This chapter presents the results corresponding to the category of *Perspectives on How Universities Should Deal with Cannabis Legalization*. It contains three themes. The first theme, *Perceived Impact of Cannabis Legalization in Universities*, presents an analysis of students' perceptions with regards to the impact that cannabis legalization may have on universities in Canada. This theme contains two subthemes explaining the two opposing positions.

The second theme in this category, *Implementing Rules on Campus*, contains four subthemes. The first subtheme covers students' perceptions regarding the importance of implementing rules on campus. The subsequent subthemes explore participants' reflections on how these rules should be implemented and who should be responsible for enforcing these rules on campus.

The third theme in this category, called, *Promoting Cannabis Education*, contains five subthemes. This section explores how students perceive the current education initiatives within university settings regarding the harms associated with cannabis use, rather than potentially offering conflicting messages. Lastly, this section provides participants' views on what would be the appropriate time (before or after legalization) for introducing educational programming about cannabis use and harms.

The following table highlights the current position in the analysis:

Table 6.1

*Thematic Organization of Chapter 6*

<p><b>Chapter 6: Perspectives on How Universities Should Deal with Cannabis Legalization</b></p> <p>Theme 1: Perceived Impact of Cannabis Legalization in Universities</p> <p>Theme 2: Implementing Rules on Campus</p> <p>Theme 3: Promoting Cannabis Education</p>
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**Theme 1: Perceived Impact of Cannabis Legalization in Universities**

The first theme in this chapter discusses how participants perceive that cannabis legalization will impact the university. Two subthemes emerged. The majority of participants relayed that legalization would have little impact, while the remainder of participants explained that it would have a negative impact on the university.

**Little impact on the university.** A number of participants in this study voiced the opinion that cannabis legalization “would not change much” within the university. Corey explained that he “can’t really see it having that much of an impact given that marijuana use is effectively tolerated on campus...I can’t really see it having much impact one way or another.” Interestingly, Danny contended that individuals would likely overreact in a manner similar to how many had over reacted when alcohol had first become legal, stating, “Like when drinking started people thought it would ruin the university, but it didn’t.” Ryan also argued that the legalization of cannabis would not change the situation much mainly due to students “not smoking on campus because it will not be legal for public consumption, probably just see private use.” Ryan further explained:

we have the Breezeway, there’s no difference – [alcohol] would impair your judgement just as much... there are current preexisting sanctions for smoking

outside...and students shouldn't be doing it anyways but, if they are, they are taking their own risk and potentially harming their education.

**Negatively impact the university.** Two participants felt that the legalization of cannabis in Canada would “negatively impact” universities. Lesley stated that:

I think it would have a negative impact... for one it will [smell bad] for two, like I said their grades will slip probably and people will be abusing it and will be coming to school high and car accidents will increase... and people will be more foolish, you know what I mean, like causing more trouble.

Lesley indicated also that there would be a “division in the university community itself,” with David concurring that there would be a divide between “people who believe that the legalization of cannabis is okay, and the people who don't.”

## **Theme 2: Implementing Rules on Campus**

This theme discusses the importance of implementing rules on campus. One subtheme explores participants' reflections on how these rules should be implemented, specifically, mirroring alcohol consumption rules. The second subtheme concerns who should be responsible for enforcing these rules on campus.

**Rules on campus.** All participants identified the importance of implementing rules on campus, including Sarah, who stated, “I think they would have to come up with rules as well because they don't want students coming to school high and stuff like that.” Lesley also advised that “cannabis shouldn't be allowed on campus, that's a definite,” further explaining that the university should have “restrictions put in place and make sure the students are informed about what is allowed and what is not allowed.” Lesley maintained that implementing rules will be “complicated” due to certain requirements for

different programs within the university. She explained that “for the RNC or the RCMP, you have to have nothing in your system for two years, but then that’s going to have to change like, if you’re allowed to smoke it, then that will be a bit conflicting.”

Although cannabis will be legal, many participants not only suggested rules be implemented on campus, but to “strictly” impose those rules for cannabis and other legal substances. Andrew stated, “regulations need to be in place even for legal drugs. And I think they should [enforce] rules if they see abuse of substances.” Jennifer underscored that cannabis laws “should be more strictly enforced and to regulate it,” recommending that if students “can detect the smell they should be able to report that person, or you should not be able to smoke on campus.” Lesley also coincided with this explaining that “there should be penalties for it if they do catch you.” Also, Danny indicated that although there should be rules in place, they should not have “a whole bunch of rules for pot, then that’s probably overreacting; having a few rules is probably okay, but not having like a book full of them.”

**Mirroring alcohol rules.** Participants suggested that with regards to cannabis rules, they should “police it the same way alcohol is policed,” and that “they should use the drinking rules.” Corey explained it in this way:

They should just try and mirror the regulations for alcohol mostly for the sake of convenience for enforcement because we already have a regime that has existed for decades around the control of alcohol. Then that regime can be copied and applied to cannabis more easily than reinventing the wheel and creating an entirely different structure so that businesses, law enforcement, government, and health

providers and everyone else has to deal with two different structures instead of just everything we know about alcohol but [applied to] cannabis.

Danny expressed that “if a student came in smelling like liquor they probably shouldn’t allow them to come to class, right? So, they could have the same rules for cannabis.”

Similarly, Corey explained that “if an undergrad is caught smoking [cannabis] in the stairwell of the education building then campus enforcement comes and tells them to beat it, cause that’s what usually happens.”

**The responsibility of professors to enforce rules.** Three participants believed that it was up to university professors to deal with students who go to class high. As Corey explained:

The professor is partly responsible for ensuring that the teaching environment is not disrupted, or [that] disruptive people have control over the environment.

[Professors] have control over who is allowed to stay in that environment or who isn’t allowed in the environment if they are being disruptive, but then again that’s the professor’s call.

Sarah also assumed that “the teacher would ask them to leave if they actually came in high because they could be disturbing the class, or people would do their best to ignore them.” Andrew also noted that “If the professor thinks that someone is coming to class stoned and is creating a disruptive environment, then that’s the professor’s call, and you know, they can deal with the consequences of whatever happens later on.”

In comparison to university professors enforcing cannabis rules in class, one participant, Lesley expressed concern that professors could potentially attend and teach classes while under the influence of cannabis. She stated, “if it’s legal professors can use

it ...like how is your class going to go if teachers are coming in high? You know what I mean? If it's like a cigarette, like, I'll go out during lunch now [and use cannabis]."

**Beyond the university's control.** Many participants indicated that, from a legal standpoint, the university "cannot do much" and does "not have a lot of power to do much." Ryan explained that if the university catches "someone smoking on campus, they could use those pre-existing laws to arrest that person." It was also suggested by participants that if the university does find a lot of students smoking cannabis on campus, they could "initiate a certain area [for use]" or otherwise be "detained." As Corey explained, if students are "staggering around, or if they are obviously stoned out of their gourd, then campus enforcement might have to detain them until they sober up, but I don't even think they are allowed to do that." This was also suggested by Sarah that, if students are high, authorities can "ask them to leave or put them in a room to make sure they were okay."

With regards to the university and implementing rules, Corey mentioned not having faith in the university itself to enforce the rules, stating that "if there would be a serious problem, campus enforcement actually didn't do any enforcement." He then abruptly stated that he "cannot see campus enforcement doing anything."

### **Theme 3: Promoting Cannabis Education**

The last theme is *Promoting Cannabis Education*. (Subtheme 1), all participants expressed that there has been a lack of cannabis education on university campuses, with the need for better educational resources to be made available for students. It was considered important to advertise the harms of cannabis use (Subtheme 2), without sending conflicting messages (Subtheme 3), providing such education/ awareness before

legalization is formally enacted (Subtheme 4).

**Lack of cannabis education.** All participants in this study stressed the importance of educating and providing awareness with regards to cannabis use and related harms. As Ryan explained, “I would encourage them to educate the people and the students because, like I mentioned, people do have pre-existing conditions and should learn to do it responsibly.” Jennifer expressed the lack of education regards to cannabis within the university, stating:

I mean they educate us on a lot of different things, and that’s good cause it’s mental health—it’s great. But when it comes to marijuana, I guess because it is a street drug you don’t hear much about it at MUN. The only thing I knew from MUN is when I took the course, so maybe if there was a drop-in information session in the landing or something, and maybe you have a doctor or someone who is reputable to go in and speak to people who are interested, they could say like, before you decide to do it here are the risks—and not just give the risks, but explain how these risks can actually impact you.

Lesley advised that university students “think that there are no negative effects” of using cannabis due to the “lack of knowledge on it, and it’s kind of hid that there are negative effects.” She explained:

like I know from experience with my friends they don’t think negative about it....  
How come these people have been smoking it, and they haven’t had any issues?  
Why wouldn’t it be legal here? You know what I mean?

With regards to cannabis education, six participants stated that they “haven’t seen anything” or “heard anything” around campus. For example, David explained:



up until now, I haven't heard a single thing that is related to cannabis positively or negatively on campus, so I don't think that any measures are taken and, as a student, I have not received any cannabis related posters or [have seen] any cannabis related issues shown anywhere up until now, other than this research.

In comparison, Sarah explained seeing a YouTube advertisement stating, "do not smoke cannabis and drive," and explained that she thinks that "they will have a lot of those when it actually becomes legalized." Jennifer also advised learning about cannabis legalization in a class, stating, "I'd say the only thing from MUN about the legalization of cannabis was actually from *Drugs and Behaviour*, like the [Psychology] course, but if I hadn't taken that, I wouldn't have known any different."

**Advertising the harms of cannabis.** A near majority of the participants expressed the significance of "advertising the harms" of cannabis use. Jennifer and Sarah both indicated this, with Jennifer explaining that the university should provide "more outreach about the harms that marijuana can do." Sarah suggested that this could be done by putting "posters up" with regards to "warning signs to protect students." David explained that students are "reasonable people, so putting up posters with the negative impacts of cannabis before it is easily accessible, and taking precautions would be better." Likewise, Ryan stated that "I think that people need to understand that there are risks; you can't drive obviously, and you need to be careful just like anything."

Jennifer suggested that it would be beneficial for the university to incorporate educational initiatives in this way:

[via] an information session in the UC or The Landing from a doctor or someone reputable like that and have them explain lifetime health or even criminal

consequences of doing cannabis. Right now, people are, like, yeah it's fun. I want to try it cause my friends are trying it but, you know, even if you do it once it is still in your system— you've been exposed to it so I think people should know.

Sarah suggested having “people to come in to talk about it and put up a little booth,” or perhaps providing a “hotline.” She further suggested having an “app for people to get in contact with others just in case they need help with it, cause even if they don't mean to get addicted, they could.”

**Conflicting messages.** When discussing the importance of advertising the harms of cannabis, participants noted that they often “don't advertise it as being bad.” Lesley further explained that students “hear marijuana as being like ‘no big deal’; like, you mellow out, or you just get the munchies, like no real negative effects come out of it that you hear.” Jennifer also explained that students will say, “yeah cannabis does this, but I only did it once so what's the harm.” Interestingly, Andrew explained that “legalization is kind of giving encouragement to people because not many people know the complete regulations of legalization.” With regards to the harms of cannabis use, Lesley elaborated:

Yeah, it isn't shown really. They tell you, kind of, not to do it. If it becomes legalized it's kind of a picture of, oh, it's fine; it helps disorders, it does all this, but I think they might be hiding some of the negative impacts of it as well. And I think they are hiding it more now than what tobacco is.... It might be like in the tobacco industry where it was okay years ago, but after a while, it just came out that it was not okay whatsoever.

Jennifer explained the importance of providing honest information regarding the effects of cannabis use, and showing what “your brain looked like before; this is what it looks

like after; and this is how your intellect will drop,” and applying advertisements into the “real-life context and the [resultant] harms. Then, I think it will have a stronger effect on people and if you do it continuously just to reinforce it, then I feel like that would have such a greater impact.”

**Educating students before legalization is implemented.** Many participants expressed the importance of educating students before legalization is applied, and that it should “start now.” Lesley expressed that “it would be good if they had something online or some type of get together...to make sure that everyone knows the rules.” Sarah expressed the importance of this, explaining that “when it does become legalized it might be a bit too late because people will already be going for it and may not be prepared. If they start [educating] now at least, they can start preparing people for things to come.” She further explained that if education is not implemented now, there could be certain consequences:

someone could get hurt, or it could hurt [the universities] image if a lot of people start doing it or, if a student just ends up dying because of it, then that will ruin the campus’s reputation and their image— everything like that. You will have a dead student all because they didn’t decide to educate them, so not good.

Corey felt that cannabis education should start even earlier, certainly by “high school” and “before they come to university” to avoid university students having to “seek out help after the fact.

### **Concluding Thoughts**

This chapter covered the results based on *Perspectives on How Universities Should Deal with Cannabis Legalization*, and it contained three themes. The first theme

provided the results corresponding to the perceived impact of cannabis legalization in universities. Most participants thought that it would have little impact on the university while some felt that it would negatively impact universities.

The second theme looked at participants' views regarding how rules should be implemented on campus. Participants relayed that cannabis rules on campus should mirror alcohol consumption rules, with university professors ensuring that rules are implemented and followed.

The third and last theme of the results section focused on students' perceptions with regards to promoting cannabis education within the university. Participants discussed the lack of cannabis education and the need for better educational resources. This included the importance of advertising the harms of cannabis use, providing realistic, honest information, and implementing the rules before legalization of cannabis is applied in Canada.

## Chapter 7: Discussion

In this chapter, I reflect on the research findings in this study, providing an interpretation of results and drawing connections with existing research literature. The overall goal of this research was to assess students' perceptions of cannabis legalization in Canada. During a time of cannabis prohibition, this study provides insight into university students' perceptions on this policy change, and on the perceived impact it may have on students attending university. The findings of this study have identified a variety of perspectives, and numerous misconceptions that are held by students with respect to cannabis and the complexities surrounding this substance.

### Preparing for Legalization

To begin, the majority of the participants in this study agreed with cannabis legalization, identifying that the current law is unreasonable, preferring more relaxed laws. This finding was similar to other findings by Brochu, Duff, Asbridge, and Erickson (2011), Osborne and Fogel (2017), and Rehm et al. (2006), insofar as the participants in this study noted that the outgoing cannabis policy was costly and that the burden and harm associated with the current cannabis law was unnecessary. Interestingly, one participant in this study expressed their reasoning for supporting cannabis legalization as being mainly due to reducing the stigma associated with cannabis use. Previous research on cannabis and stigma had similarly found that cannabis legalization would reduce the stigma regarding cannabis use and the associated negative stereotypes (Dahl, 2015; Hathaway, Comeau, & Erickson, 2011; Mostaghim & Hathaway, 2013).

**Profit/Tax revenue.** A significant benefit of cannabis legalization perceived by participants in this study was the additional revenue that taxing cannabis could produce

for the Canadian economy. Participants believed that these funds would provide economic growth instead of supporting criminal organizations. This mirrored the recent literature that if cannabis is taxed appropriately, it will generate billions of dollars in government revenue (Mulgrew, 2006). Participants also expressed that money produced from cannabis sales could be put towards funding drug education initiatives, treatment centres, and after school programming. This finding is noteworthy due to participants having identified cannabis education as being needed, for which added revenue could produce the much-needed funds. Sullum (2016) research also identified that the cannabis tax money generated could be aimed at improving a number of different programs, as was done in Colorado to help fund government educational programs and public schools.

**Safer product.** In this research, participants identified that regulating cannabis in Canada would ensure a safer product whereby users could be confident that their cannabis did not contain harmful chemicals or other pollutants. Also emphasized were the benefits of receiving cannabis from a reputable source, thereby decreasing risks associated with being in contact with drug dealers. Previous research similarly found that cannabis legalization would likely be effective in reducing the direct and indirect harms associated with cannabis use and with the illegal drug trade (Cox, 2018; Pacula, Kilmer, Wagenaar, Chaloupka, & Caulkins, 2014). For example, in her qualitative study, Lau et al. (2015) found that cannabis users who had access to a regulated cannabis market were more aware of the ingredients in their cannabis, more attuned to the risks, and overall better equipped to practice harm reduction.

**Crime rates.** In general, this study supported the view that legalization of cannabis could decrease crime rates in Canada. Participants suggested that users would

move to buying cannabis legally because it would be cheaper, reducing or eliminating any association with drug dealers and leading to a decrease in crime rates. Other research confirmed that a decrease in crime rate would largely depend on how cannabis would be priced and taxed (Caulkins et al., 2012; Caulkins et al., 2013; Kilmer, 2014). If cannabis is priced appropriately, users will more than likely buy from reputable sources rather than from drug dealers (Marie & Zolitz, 2017). This would potentially decrease crime rates associated with the illegal trade of cannabis as well as eliminate a source of revenue for organized crime.

Pedersen and Skardhamar (2010) suggested that using cannabis does not necessarily represent a risk factor for criminal involvement. Uniquely in this study, some participants explained that cannabis legalization would lead to an increase in crime rates, and could even promote users of cannabis participating in criminal activity. This could be seen as a misconception of cannabis use; however, this perception can also serve as a cautionary note regarding the confusion that can reign among students or the perceived detrimental effects of cannabis legalization on criminal activity. The implications of this can have important ramifications for students' well-being. If they think that crime will go up, this could suggest an increase in anxiety and apprehension on the part of the students. Therefore, this perception offers as an opportunity to acknowledge anxieties among university students and to consider helpful interventions. With legalization of cannabis approaching, this notion helps inform the appropriate individuals to facilitate education to address anxiety and its effects on students' lives.

**Driving a motor vehicle.** This study corroborates previous research findings showing that many participants in this study are concerned that cannabis legalization may

lead to an increase in driving while under the influence of cannabis (Hall & Babor, 2000; Hall & Room, 2008). Cannabis use increases high-risk activities such as driving while under the influence of cannabis, or driving with a driver who is under the influence of cannabis (Arria, Caldeira, Vincent, Garnier-Dykstra, & O'Grady, 2011). Due to the associated impaired effects associated with cannabis use, evidence suggests that cannabis use impairs crucial psycho-motor skills required for driving (Lenne et al., 2010; Ramaekers, Berghaus, Van Laar, & Drummer, 2004). Participants in this study, as well as in other research, indicated having a concern about increased motor vehicle accidents by legalizing cannabis (Brady & Li, 2014; Drummer et al., 2004; Gjerde & Morland, 2016; Raes & Verstraete, 2005). Participants explained the importance of imposing rules and regulations to prevent individuals from driving under the influence of cannabis but did not discuss the perceived implications of driving impaired. Rather, participants simply assumed that driving while under the influence of cannabis would increase. Research conducted by Desrosiers et al. (2015) discussed the implications of driving after using cannabis. This included distorted perceptions, impaired concentration, coordination and balance—all potentially leading to accidents and fatalities when driving. In contrast, some researchers including Anderson et al. (2013) suggest that legalizing cannabis could lead to a decrease in vehicle accidents. Although research has provided significant evidence on this topic, it is still a heavily debated issue and requires more research.

### **Cannabis Use Among University Students**

**Relieves stress.** Interestingly, one of the main factors indicated in this study for students' current use of cannabis was to relieve stress and, as suggested by previous research, cannabis is commonly used to alleviate and numb unpleasant feelings (Simons,



Correia, Carey, & Borsari, 2000). Participants in this study explained that due to various academic responsibilities in university, using cannabis can decrease stress, increase concentration, and facilitate being calm. In other words, cannabis use among university students is seen to relieve the psychological feelings of anxiety and stress and, because of this, cannabis was perceived as being beneficial for university students. According to past research, cannabis appears to be used primarily as a means of tension-reduction or self-medication (Bergamaschi et al., 2011; Crippa et al., 2011) particularly to reduce stress and to relax (Beck et al., 2009; Brodbeck, Matter, Page & Moggi, 2007; Lee, Neighbors, & Woods, 2007). Previous research has also demonstrated, however, that the use of cannabis, particularly chronic use, is associated with impaired attention (Porath-Waller, 2009), which is contradictory to cannabis use being seen to improve concentration as was indicated by participants in this study. Thus, it can be assumed that there needs to be more initiatives in place to help students learn to better deal with the stress of attending university, especially where it is regarded that students may be underestimating the negative behavioural and cognitive impacts behind cannabis use. Students could benefit from techniques aimed at teaching students more adaptive skills to expand students' awareness of cannabis related harms and to deal with the associated stress of university.

**“Gateway drug” hypothesis.** A main concern of cannabis legalization is the possibility that cannabis use will lead to the use of “harder” and more “dangerous” drugs (Morral et al., 2002). The majority of participants in this study did not agree with this hypothesis, explaining that cannabis use does not lead to the urge to experiment with other drugs, and thus is not a “gateway” to other illegal drugs. Much of the reviewed previous literature did not support the notion of cannabis as a gateway drug either (Hall &

Lynskey, 2016; Reinerman, Cohen, & Kaal, 2004). Osborne and Fogel (2017) also explicated that the vast majority of individuals who use cannabis do not progress to other illegal drugs, adding that there is no pharmacological property in cannabis that pushes individuals to seek out other drugs. This was also found in the Hall and Lynskey (2016) study, finding that individuals who do seek other drugs do so because of certain social and psychological factors. These factors include having parents who use illicit drugs, socializing with peers who use illicit drugs, or having a predisposition toward risk-taking behaviour. Although the notion that cannabis use leads to other illegal drugs has been seriously questioned, participants in this study did express the likelihood of an increase in cannabis use after legalization. This issue will be explored in greater detail in the next section.

**Increase in use.** The concern was expressed in this study, and in others, that there would be an increase in cannabis use after cannabis is legalized (Gallet, 2014; Marie & Zolitz, 2017; Pacula, 2010; Pacula, Powell, Heaton, & Sevigny, 2015). Participants in this study explained that the current illegal status of cannabis was, in their view, what prevents individuals from using cannabis; thus, legalization will presumably increase students' use, including those students who are under the legal age. Research has identified that legalizing cannabis would lead to greater recreational use among adults as well as those under the prescribed legal age (Pacula et al., 2015). Only one participant in this current study held the view that legalizing cannabis would not increase students' use, and that it could, in fact, decrease cannabis use. A number of previous studies did not find a correlation between cannabis legalization and a decrease in use, rather tending to find that cannabis legalization had little to no impact on consumption patterns (Maccoun &

Reuter, 2001; Osborne & Fogel, 2017; Pacula, 2010; Single, Christie, & Ali, 2000; Thies & Register, 1993). Hence, it seems that the legalization of cannabis would likely contribute to an overall increase in cannabis use. It is noteworthy, however, that some previous studies have reported that cannabis use depends more on family and work responsibilities, financial considerations, and personal preference (Asbridge, Valleriani, Kwok, & Erickson, 2016; Brochu et al., 2011; Duff et al., 2012; Duff & Erickson, 2014).

### **Systemic Guidelines**

The development of systemic guidelines with regards to implementing rules and regulations on university campuses is largely neglected in the current research. Therefore, this section was specifically conceived to address this gap in the existing research. Participants in this study identified the importance of implementing cannabis rules on campus. The Buckner, Walukevich, Lemke, and Jeffries (2018) study is the only known research that has verified the importance of implementing rules on campus, advising that these rules can lead to a decrease in overall cannabis use among university students. Implementing rules on campus could allow for a smoother transition for students with regard to the legalization of cannabis so that students' education during the transition period will not be compromised. One participant in the present study expressed concern during the transition period that professors might teach lectures while under the influence after cannabis legalization is applied. This was an important concern where campus policy makers should not just apply these guidelines and rules to students, but they also need to apply to all employees, including professors, staff, and administrative personnel.

The participants in this study, like the participants in the Hathaway et al. (2007) study recommended that the rules on cannabis use mirror the alcohol rules. The

predominate reason was the convenience it would provide for enforcement and other personnel regarding what is acceptable or unacceptable. It was further explained that if rules are implemented in this way, it would be less challenging for students to follow and understand. Just as alcohol regulations have age restrictions, it was suggested in this study that the same restrictions should be placed on purchasing cannabis. This is important in a university setting, where underage individuals need to be deterred from purchasing and using cannabis, particularly when they are on university grounds as when living in residence. Past research has identified that the main goal of cannabis legalization is to protect young Canadians by insuring that cannabis is kept out of their hands (Cox, 2018; Government of Canada, 2017). Applying these age restrictions would limit the harm associated with the developing brain of young individuals, as they more susceptible to harm from cannabis use that can alter brain chemistry and functional abilities (Bava & Tapert, 2010; Gaffuri, Ladarre, & Lenkei, 2012; Meier et al., 2012; Zalesky et al., 2012). As with previous research, the present study affirmed that age restrictions for purchasing cannabis are essential to have in place (Gogtay et al., 2004; Meier et al., 2012)

An interesting finding in this research was the likelihood of an increase in cannabis smell in public places, especially in universities. Cannabis smell would be a concern, in part, because it is Canadian government policy that smoking cannabis will not be tolerated in public places. In addition to the Canadian government's stipulated mandate to ensure that public places are safe for everyone, territorial and local jurisdictions plan to include cannabis in anti-smoking bylaws (Spithoff, Emerson, & Spithoff, 2015). In contrast to participants' perspectives in this study, Mello et al. (2013) suggested that the opposite would actually occur where there would be a decrease in the

smell of cannabis with legalization. In maintaining that the restriction of alcohol and tobacco use in public places deterred problematic use, their participants concluded that the same restrictions on cannabis use would likely result in the same. It is essential to apply the same rules and guidelines, specifically anti-smoking on campus, to restrict students from smoking wherever they please. This will hopefully limit students and employees in the university setting from using cannabis while attending classes or while working.

### **Education**

Findings from this study emphasize the importance of promoting cannabis education for university students, an issue that has received relatively little attention in the literature. Cannabis education would enhance student preparedness for being able to accommodate the inevitable changes that will come about when legalization occurs. All participants in this study discussed the lack of cannabis education among the university population, emphasizing the need for more educational programs. Thus, the common and immediate response of participants when discussing cannabis education was their awareness of the lack thereof. In the following sections, cannabis education for its impact on academics, on health, and in comparison to other substances will be considered, where participants expressed a considerable range of views.

**Impact on academics.** As previously mentioned, participants explained that the main indicator of students' current cannabis use was to relieve stress associated with attending university. Interestingly, in this study participants reported that cannabis use could actually help students academically, especially if students are stressed before writing an exam. Other participants indicated that cannabis use can negatively impact

academics, consistent with previous research (Buckner et al., 2010; Fergusson & Boden, 2008; Lynskey et al., 2003; Volkow et al., 2014). One participant went so far as to suggest that frequent use of cannabis can affect students' intelligence level and overall IQ. Although a decline in IQ has been suggested in the literature, Meier et al. (2012) maintained that it occurred only when consumed chronically from a young age. It is evident that the participants in this study presented conflicting views concerning the impact that cannabis use can have on students' academics. Given these prevalent and conflicting views of students, it would seem that universities need to raise awareness regarding the impact of cannabis use on academics. Educational initiatives need to provide students with accurate, valid information on the relationship between cannabis use and scholastic endeavors. Students need educational resources to better equip them to succeed academically even as cannabis is legalized. They need to have better alternatives and appropriate skills at their disposal to help them manage myriad stressors amid the many additional demands placed on them.

**Impact on health.** An important topic that students need to be educated on is the impact that cannabis could have on their mental and physical health. Participants in this study had varied responses showing a range of understanding regarding these impacts; many seemed unaware of the harms of cannabis use, while others were aware of some of the potential harms of cannabis use such as with respect to the possibility of cannabis use triggering pre-existing mental health conditions, for example. Participants also advised that because of the lack of cannabis information, there are many misconceptions, even assuming that there are no negative effects of cannabis use.

With regards to mental health, participants in this study expressed uncertainty as

to the impact that cannabis use would have on mental health. As stated above, some participants in this study explained that cannabis use could cause the emergence of mental health conditions such as schizophrenia and psychosis for those individuals predisposed to such conditions. This concern has been substantiated by a large body of research suggesting that chronic cannabis use may increase the risk of several mental health outcomes, specifically psychosis and schizophrenia (Arseneault, Cannon, Murray, & Witton, 2004; Caspi et al., 2005; Hall, Degenhardt, & Teesson, 2009). The indications are that such negative mental health side effects are extraordinary and usually only appear with higher frequency of cannabis use, exposure to cannabis at a young age, and when there is a preexisting genetic vulnerability (Di Forti, 2012). Interestingly, the remaining participants assumed that cannabis use could have a positive impact on mental health, possibly due to the message individuals are given that cannabis is beneficial for medicinal purposes. Participants in this study verified this notion, explaining that cannabis could be in some way a self-medication for certain mental health issues. This marks a departure from previous research and appears, in general, to be a misconception of cannabis's benefits, as empirical evidence to support such benefits is thus far lacking. Given the high prevalence of concurrent mental health problems among those who use cannabis, and the lack of knowledge that was reflected in this study, educational initiatives should be implemented as a priority among university students and rigorously evaluated.

With respect to students' perceptions of the relationship between cannabis and its impact on physical health, participant responses were also varied. An interesting argument made during this study was that the physical health implications of using cannabis is dependent upon the way in which cannabis is used, specifically whether it is

vaporized or combusted. Some participants described cannabis smoke as carcinogenic, and therefore, depending on how cannabis is used, it could potentially cause cancer. similar to what is known to occur for tobacco. Other studies suggest that vaporizing cannabis is associated with fewer respiratory symptoms than is associated with smoking cannabis (Barnwell & Earleywine, 2007; Van Dam & Earleywine, 2010). While cannabis may also be ingested orally, this was not a method referred to in the present study.

Although some perceptions by participants in this study were similar to those participants in previous research, in this study some participants also implied that using cannabis can be beneficial for treating certain ailments, and for improving one's physical health. These perceived benefits were tied to improving or even curing certain health conditions such as cancer, and anorexia. It was expressed in this study that cannabis could be beneficial for those receiving chemotherapy or could be an alternative drug for those who require more dangerous drugs. It was apparent from the views expressed in this research study that participants have some misconceptions regarding the potential benefits of cannabis in "treating" physical health issues and illnesses such as cancer. Although research has suggested that cannabis can help alleviate the symptoms of certain health conditions (i.e, pain and nausea relief), cannabis use does not actually constitute a treatment for different, often severe, health conditions (Cathcart, De Giorgio, & Stebbing, 2015). The potential medical effects of cannabis use for treating physical issues, such as cancer, are unclear at this time, and far from conclusive (Kalant, Porath-Waller, & Canadian Centre on Substance Abuse, 2012). Therefore, students' need to be provided with accurate information on the medicinal benefits of cannabis.

**Cannabis compared to other substances.** Participants in this study also



presented as frequently unknowledgeable when comparing cannabis to other substances, specifically tobacco and alcohol. When comparing cannabis to alcohol, some participants suggested that cannabis use was less harmful than that of alcohol, a drug to which cannabis is often compared in terms of health hazards. Those claims were supported by Lachenmeier and Rehm (2015) who conducted a comparative risk assessment of several drugs, including cannabis and alcohol, finding that alcohol has associated higher risks than cannabis. Other research suggests that both cigarettes and alcohol are more harmful than cannabis (Akre, Michaud, Berchtold, & Suris, 2010). The remainder of the participants provided mixed views on this topic, informing that cannabis has harmful impacts similar to those found with cigarettes and alcohol (McIntosh, MacDonald, & McKeganey, 2003; Menghrajani et al., 2005).

While educating students on cannabis compared to other drugs, it is important to understand that even though tobacco and alcohol accounts for the general burden of diseases (Degenhardt & Hall, 2012) it is not because they are more dangerous than illegal drugs but because their legal status allows for more widespread exposure. Thus, when comparing substances, legal or illegal, their harmful effects not only depend on chemical properties of the substances, but also on the availability and acceptability of the substance in question. Therefore, one can assume that the harms of cannabis may be more pronounced after legalization, and this warrants further research.

When relating cannabis to other illegal drugs such as cocaine and ecstasy, participants in this study viewed cannabis as much safer and “incomparable to other illegal substances”. This is supported by previous research where students perceived cannabis to be less problematic than other illicit drugs (Ecker, Richter, & Buckner, 2014;

Neighbors, Geisner, & Lee, 2008). Although it has been confirmed that cannabis is less harmful than other illegal drugs, participants in this study presented certain misconceptions when discussing this topic. When participants explained that cannabis is unlike other illegal drugs, their explanations for this thinking was due to cannabis being non-addictive and providing medicinal benefits that no other illegal drug offers. Unlike the views presented in this research, findings from other research indicates that long-term cannabis use can indeed lead to addiction (Lopez-Quintero et al., 2011; Simons et al., 2005). As Sarvet et al. (2018) claim, it may well be that the promotion of cannabis has effectively provided false advertising to individuals that cannabis is not harmful. This finding necessitates that attention be drawn to addressing this misconception by providing reliable information to this target group, as one way to establish better knowledge with respect to potential cannabis harms.

### **Educating Accurate Cannabis Information**

As was mentioned above, the responses of participants in this study suggest that many university students either lack knowledge, or are misinformed, regarding the harms of cannabis, often assuming that there are no harms involved at all. This state of student knowledge could reflect the mixed messages that students and others receive regarding cannabis, influencing the views that the participants in turn expressed in this study. Previous research indicated that students often receive inaccurate education on cannabis use; sometimes overinflating the dangers of cannabis use, sometimes presenting cannabis as a relatively harmless substance having medicinal benefits (Carliner et al., 2017; Sarvet, 2018; Walker, 2017). In the present research, participants discussed this concern with receiving conflicting information, wherein advertising cannabis use as beneficial can lead

students to believe that cannabis use is “no big deal” and has no negative consequences. Such perceptions as conveyed in this study likely indicates the need for, and urgency of, having suitable and accurate information to clarify the problematic aspects of cannabis use, its legal status, and the overall consequences of cannabis use in Canada. Many participants in this study expressed confusion and provided misinterpretations around a variety of topics that become particularly relevant and important with cannabis legalization. Therefore, there is a need to develop a more nuanced set of educational initiatives to promote greater awareness and to help students make more informed decisions around cannabis use.

### **Advice from Participants**

With regards to cannabis education, all participants in this study advised that cannabis education should be incorporated into a more unified university response ideally before cannabis legalization is formally applied in October, 2018. Participants explained that if educating initiatives are started now, it would prepare students for the inevitable. Participants also explained that if education is not applied before cannabis legalization, there could be negative consequences for students as well as for universities and their reputation. For example, one participant explained that a student could die as result of errors, oversights or miscalculating due to not being better informed on the risks associated with cannabis use and cannabis use practices. Misconceptions of cannabis use may prevail, with increased risk for resultant harm, if individuals lack insight into the potential personal, interpersonal, and academic drawbacks associated with cannabis use. Therefore, it is imperative to educate university students with appropriate and accurate information, and to tailor interventions that align with the expressed concerns of many of

the students in this study regarding cannabis legalization in Canada. Participants provided numerous examples of ways that the university could better inform students regarding these harms. These included creating posters explaining the warning signs and possible adverse impacts of cannabis use, providing educational initiatives that include cannabis information sessions and providing reputable guest speakers. Participants also discussed creating a booth, a hotline, or an app to provide various means for the dissemination of this necessary information to students.

### **Concluding Thoughts**

This thesis provided a snapshot of students' perceptions on the legalization of cannabis in Canada during a time of prohibition, providing insight into their views on the impact that the legalization of cannabis could have on individuals who attend university. Osborne and Fogel (2017) explained that a new drug policy implementation is most effective when the individuals who use cannabis are consulted and their perceptions are taken into account. The results from this research highlight the complexity surrounding student perceptions of cannabis and confirm the need of educational initiatives because of the lack of knowledge, and the prevalent misconceptions that exist concerning cannabis use and its impacts that were explored in this thesis. An important finding from this study is the need to increase students' awareness of cannabis and of potential harms associated with its use, and to open up a discussion that will allow university students to freely examine any misconceptions they may have in comparison with more factual information. Overall, it is felt that this research achieved its goal of examining students' perceptions on the topic at hand, providing recommendations, in support of fostering a learning environment that will remain conducive to student learning within the new reality of

cannabis legalization.

## **Chapter 8: Limitations and Recommendations**

This Chapter explores the limitations of the current study as well as recommendations for future research.

### **Limitations**

Although this research has reached its aims, there were some unavoidable limitations. Due to the size of the population and sampling method the results cannot be generalized to the overall population at Memorial University, other universities, or to the population at large. However, generalization was not intended and these findings are in line with the framework that guided the study. Nevertheless, there were some interesting perceptions presented in this study that might reasonably be expected to also exist among students at other universities that would merit further research as part of confirming generalizability.

Another possible limitation was that the participants in this study were not asked to report their own cannabis use, although they could have disclosed this if they had wanted to. Although participants were advised of confidentiality and anonymity in participating in this study, they still could have been somewhat hesitant to discuss their perceptions regarding a substance that offers criminal sanctions at the present time. Of course, cannabis use, except when authorized on medical grounds, was illegal during the time of the interviews. This could have influenced how participants responded, particularly current cannabis users. However, participants did not report any concern or regret regarding their decision to participate in this study.

Since the quality of the data that is collected through qualitative research is highly based on the participants' worldview, it could have been a disadvantage that I might have

inadvertently imposed my own worldview while creating the themes and subthemes that were presented in this study. Although I attempted to be transparent and fair when interpreting results, the information gathered could have been filtered through my own biases and understanding. Another researcher may have organized the presentation of the results in this research differently.

In this research, a sincere attempt was made to achieve a fair and balanced portrayal of participants' viewpoints on cannabis legalization. In this study, controls were in place to help remove the potential for any biases including writing in a journal and communicating with my supervisor throughout each step of this research. Even though there were controls in place to help remove the potential for biases it is still possible that biases occurred.

### **Recommendations for Further Research**

Although the health impacts of using cannabis has been widely researched, research conducted on students' perceptions of cannabis legalization in Canada is limited. This research presents as one of the first to study perceptions of legalization of cannabis in Canada, specifically focusing on university students, who may be greater affected by the change in law. Thus, more research is needed on this topic; recommendations for further research in this area will be discussed below.

First and foremost, because a small sample may not be representative of a larger population, it may be worthwhile to follow-up with a larger qualitative sample. This would potentially help widen the scope and possibly reveal comparable findings that would help to broaden and validate the results in this study. Also, given that students were sampled from one university only, future studies may benefit from the inclusion of

data from various universities in different provinces of Canada. Results from students attending multiple universities would more comprehensively capture the perceptions of students from a broader range of academic programs and backgrounds.

Over the course of this data collection and analysis, interesting themes arose that could each benefit from more in-depth research study. This could include studying the perceived impact of cannabis legalization on topics such as academics, health, and relationships. Although prior research has examined some of these topics in-depth for alcohol use, now that cannabis will be legal, cannabis related research should be just as thorough and extensive.

Also, more qualitative research on cannabis legalization and use with respect to universities would be beneficial. While some studies, including this one, has laid the groundwork for a broader understanding of university students' perceptions on cannabis legalization, there has been little qualitative research on the topic. To better understand students' perceptions, it is necessary to continue collecting this type of qualitative data.

Despite the limitations, the present study investigated and provided an initial understanding of students' perceptions on the legalization of cannabis in Canada as well as reviewing the existent cannabis literature. Utilizing a generic qualitative research approach, as was done in this study, provided a flexible approach to understanding students' perceptions, with insights that should prove useful to other researchers and policy makers who are invested in promoting the personal development and academic achievements of students. This study is of particular importance considering the current transition to cannabis legalization in Canada wherein findings from this study and from other research can help stakeholders better understand students' perceptions around



cannabis legalization in Canada.

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## Appendix A: Research Recruitment Document

# Participate in a study on your perceptions of cannabis legalization!

The purpose of this study is to understand undergraduate students' perceptions of legalization of cannabis in Canada at Memorial University of Newfoundland.

To participate in this study, you must be:

- ✓ Current undergraduate student attending Memorial University of Newfoundland
- ✓ Comfortable in the English language

This is a 45-60-minute one-on-one interview. You will be asked to talk about your perceptions about legalization of cannabis in Canada.

Participants will be compensated with a \$25 Visa gift card.

The ethics protocol for this project has been reviewed and cleared by the Memorial University Research Ethics Board. If you have any ethical concerns with the study, such as your rights as a participant, you may contact the Chairperson of the ICEHR at [icehr.chair@mun.ca](mailto:icehr.chair@mun.ca) or by telephone at 709-864-2861.

Please contact the researcher Melissa Hussey, who will be conducting

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## **Appendix B: Informed Consent Form**

**Title:** Perspectives on the Legalization of Cannabis in Canada and how this may impact University Life

**Researcher: Melissa Hussey**  
Counselling Psychology Graduate Student  
Memorial University  
**(709) 769-6091**

**Supervisor: Dr. Greg Harris**  
Faculty of Education  
Memorial University  
**(709) 864-6925**

You are invited to take part in this study titled “Perspectives on the Legalization of Cannabis in Canada and how this may impact University Life”. The purpose of this study is to learn about your perceptions about the topic of legalization of cannabis in Canada and how you feel it will impact you while attending University. As part of my Master’s degree, I am conducting this research under the supervision of Dr. Greg Harris.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future. Once the interview is completed, you will have up to 14 days to indicate if you would like to have your information removed from the study. After this point, your information will be integrated with other participants’ data and removing it will no longer be possible.

**Purpose of the Study:** The purpose of this study is to understand undergraduate students’ perceptions of legalization of cannabis in Canada at Memorial University of Newfoundland.

**What you will do in this Study:** You will be invited to attend a one-on-one semi-structured interview with the researcher to answer a series of open-ended questions about your perceptions regarding the legalization of cannabis in Canada. You may skip any questions that you do not wish to answer. This interview will be audio-recorded, with your consent.

**Length:** Your participation in this study will take approximately 45-60 minutes. This includes time for us to review informed consent, to conduct the interview, and to address any concerns or questions you may have.

**Withdrawal from the Study:** Your participation in this study is entirely voluntary. Should you agree to participate, you may withdraw without consequence at any time either during or after the interview. If you withdraw during the interview, your interview

recording will be immediately destroyed. If you withdraw after the interview has been completed, you can ask to have the data from your interview withdrawn, at which time both the recorded interview and the transcript will be destroyed and nothing that you have contributed will be included in the research. This data removal will be possible up until the aggregation of participant data which will happen 14 days following the completion of your interview.

**Possible Harms, Risks or Discomforts:** It is not likely that there will be any harms or discomforts associated with participating in this study. You do not need to answer questions that you do not want to answer or that make you feel uncomfortable. I have explained below the steps I am taking to protect your privacy. In the case of any harms or discomforts associated with this study, you can avail of the following resource: Memorial University's Student Wellness and Counselling Centre (UC5000)- (709) 864-8874.

**Potential Benefits:** People who participate in this study may enjoy exploring and contributing to the discourse on the topics at hand.

**Payment or Reimbursement:** You will be compensated a \$25 Visa Gift Card for your time.

**Confidentiality:** The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use, or disclosure. You may choose to use a pseudonym during the taped interview in order to maximize the protection of your identity. However, your participation in this study is completely confidential and all published data will be anonymized.

There are legal limits on confidentiality, whereby if the researcher becomes aware, or suspects child abuse and if the participant is a danger to themselves or others, the researcher will be obligated to report to the appropriate authorities. Also, legal authorities could subpoena the researcher to testify or examine files.

**Anonymity:** Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance. No identifying information will be solicited at any time during this interview, and should it arise, it will never be disclosed to anyone nor included in any reports or publications.

**Storage of Data:** Audio recordings and transcripts will be stored as encrypted files on this researcher's password-protected computer. Any identifying information will be removed from the transcripts. Data will be stored in a secure location in a locked filing cabinet and consent forms will be stored separately from the data. My research supervisor, Dr. Harris, and I will be the only people with access to this data. Data will be kept for a minimum of five years as required by Memorial University's policy on Integrity in Scholarly Research.

**Reporting of Results:** The data collected in this study will be presented in Melissa Hussey's Master's thesis, and results may be presented or published by the researchers. The thesis will be publicly available at the QEII library. The data collected in this study will be reported without any personally identifying information. Any direct quotations will be anonymized. A summary of the results will be available approximately December 2019. If you would like to receive the summary, please let me know how you would like me to send it to you.

**Questions about the Study:** If you have questions or need more information about the study itself, please contact me at:

[mhh235@mun.ca](mailto:mhh235@mun.ca) or  
(709) 769-6091

This study has been reviewed by the Memorial University Ethics Board and received ethics clearance. If you have any ethical concerns with the study, such as your rights as a participant, you may contact the Chairperson of the ICEHR at [icehr.chair@mun.ca](mailto:icehr.chair@mun.ca) or by telephone at 709-864-2861.

### CONSENT

- I have read the information presented in the information letter about a study being conducted by Melissa Hussey, of Memorial University of Newfoundland.
- I have had the opportunity to ask questions about my involvement in this study and to receive additional details I requested.
- I understand that if I agree to participate in this study, I may withdraw from the study at any time or up until approximately 14 days following my interview.
- I understand that if I choose to end participation **during** data collection, any data collected up to that point will be destroyed.
- I have been given a copy of this form.
- I agree to participate in the study.

I agree that the interview can be audio recorded.      ☐ Yes ☐ No

I agree to the use of direct quotations in the thesis and any other subsequent publications or presentations.      ☐ Yes ☐ No

By consenting, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

**For Oral Consent:** I, Melissa Hussey, reviewed and explained this consent form with the participant before receiving the participant's consent, and the participant had knowledge of its contents and appeared to understand

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Researcher's Signature:** I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Appendix C: Semi-Structured Interview Questions

*You can refuse any questions that you do not wish to answer, including demographics.*

1. What is your:  
     Age?  
     Year of study?  
     Major?
2. How do you feel about the current regulations of cannabis in Canada?
3. How do you see cannabis in relation to other types of substance use such as smoking tobacco, using alcohol, or other types of illegal drugs such as cocaine or ecstasy?
4. How do you think the government should address cannabis in Canada?  
     e.g., prompts: status quo, legalized for medical use,  
     legalized for recreational use, decriminalized.
5. Why do you think cannabis is the most commonly used illegal drug among university students in Canada?
6. What kind of effect do you think the legalization of cannabis would have on university students?  
     e.g., prompts: impact patterns of use for university students,  
     lead to more university students using other illicit drugs (gateway drug), impacts  
     on academics, impacts on mental or physical health, impacts on relationships.
7. What kinds of impacts do you think legalization of cannabis would have on the university as an institution? On the university community?
8. What are your perceptions on how legalization might affect yours or other students' academic performance?
9. What are some potential dangers of legalization?
10. What are some potential benefits of legalization?
11. What do you think a legal marketplace for cannabis might look like?
12. How should the university regulate or police cannabis use on campus?
13. If you were able to offer the university some advice on legal cannabis use on campus, what advice would you give?